The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 762.—Vol. XX.] LONDON, SATURDAY, MARCH 30, 1850. [Price 6d.

VALUABLE MINE SHARES, AND SHARES IN A SHIP FOR SALE.

TO BE SOLD, BY AUCTION, on Tuesday, the 2d April next, at One o'clock, at the Union Hotel, PENZANCE, unless previously disposed of by private contract, of which due notice will be given, SEVENTY-FIVE (200ths) SHARES of and in the very desirable MINES called

TRELYON CONSOLIDATED MINES,

situate in the parishes of ST. IVES and LELANT, in the county of CORNWALL.

These MINES produce TIN and COPPER, and for the last eight months have very nearly paid the cost; during which time a shaft has been sunk 20 fms. on a lode, having in it separate courses of tin and copper. There are several lodes in the sett, and it only requires a little outlay to open ground to make the mine one of the best in the neighbourhood. A sight of it and its locality would convince any miner of the desirableness of the speculation. The lodes are parallel with Providence Mines lodes, adjoining the sett, in which mines about 20 tons of tin are raised monthly, at a considerable profit to the adventurers. There is an adit driven in the sett from the sea level, 300 fms. west, 60 fms. deep; and, by driving that adit 60 fms. further west, a junction of granite and killas would be met with, and a cross-course which runs through Providence Mines, where a large quantity of tin has been raised. The adit might be driven for about £3 10s. per fathom, and there is a shaft from surface to the adit, about 30 fathoms from the end.

Also, THIRTY (64ths) of the good schooner called the "ARAB," of Penzance, Samuel Richards, master, now laden with copper ore, having left this port this morning for Swansea. This vessel carries 150 tons, pays the owners well, and is, in every respect, well found.

The mine shares, as well as the shares in the vessel, will be sold in lots, for the convenience of purchasers. The vendor will still retain a considerable interest in the mine and the vessel.

For any further information, application should be made to J. B. Merifield, auctioneer, &c., Penzance.—Penzance, March 19, 1850.

LLIW FORGE, NEAR SWANSEA, GLAMORGANSHIRE.

MR. THOS. GLOVER will SELL, BY AUCTION, at the Mackworth Arms Inn, SWANSEA, on Saturday, the 6th of April, 1850, at One o'clock in the afternoon, subject to such conditions as shall be produced at the time and place of sale, the

LLIW FORGE,

now in full work, consisting of USE and PLATING HAMMERS, and MACHINERY connected therewith. FINISHING SHOPS, SHOVEL MANUFACTORY, and requisite TOOLS and UTENSILS.

Also, the COUNTING-HOUSE, STORES, and STABLE, belonging thereto, and the PUBLIC-HOUSE, called "The Buck," FIVE COTTAGES, and SMITH'S SHOP, and about TEN ACRES of PASTURE LAND, formerly part of Pandy Farm.

The premises are situate about 6 miles from Swansea, on the turnpike-road from Swansea to Pontardulais. They are held for a term of 60 years, commencing at Michaelmas, 1844, at the yearly rent of £55, subject, as to the public-house and one of the cottages, to agreements for underleases for the residue of the vendor's term.

The works are supplied with a never-failing water-power from the River Lliw.

Further particulars may be had at the offices of Messrs. Llewellyn and Randall, solicitors, Neath; or of the auctioneer, Castle Bailey-street, Swansea.

SPELTER OR SMELTING WORKS, HOLYWELL, FLINTSHIRE.—This FREEHOLD PROPERTY, of about 28 acres, TO BE LET, OR SOLD; it has a FRONTAGE and WHARF to the River Dee, and the Chester and Holyhead Railway passes through it.—Full particulars may be had of Mr. Langhorn, at the Halkin Mines, near Holywell; or Mr. Surman, Lincoln's Inn; and the person in charge of the works will show any one over the property.

BLAIR IRON-WORKS.—These extensive IRON-WORKS, with the LEASES of the MINERAL FIELDS, as formerly advertised, will be EXPOSED FOR PUBLIC COMPETITION on or about the month of APRIL next, if not previously disposed of by private bargain.—In the meantime offers will be received, and information afforded, by Mr. Brown, 35, St. Vincent-place, Glasgow.

EAST OF SCOTLAND MALLEABLE IRON COMPANY.

—The Directors have been authorised to RECEIVE OFFERS for the PURCHASE, or LEASE, of the MALLEABLE IRON WORKS at DUNFERMLINE—comprising a STEAM-ENGINE, of 60-horse power, working the machinery, consisting of FORGE and PUDDLE BAR TRAINS, of 15 inches diameter, HAMMER and PATENT SHINGLING MACHINE; also a 16-inch MERCHANT BAR or RAIL MILL, a 12-inch MILL, for ordinary sized merchant bars, and an 8-inch GUIDE MILL, 13 PUDDLING FURNACES, and 6 MILL FURNACES—the whole capable of producing 120 tons of bar-iron weekly.

A REFINERY STEAM-ENGINE, of 45-horse power, with blowing apparatus, complete, and two fires erected.

A complete SET of WORK-SHOPS, containing a 20-horse power STEAM-ENGINE, driving a powerful roll-turning lathe, and blowing apparatus for smiths' fires.

A PUMPING and CLAY MILL STEAM-ENGINE, of 16-horse power, used for the manufacture of fire-brick, and pumping water for supply of engines.

Also, in course of erection, a STEAM-ENGINE, of 80-horse power, intended to drive the mills apart from the forges, having strong cast-iron framing laid down, and machinery suitable on the premises, which could be brought into active operation in a short period.

Together with the necessary TOOLS, LOOSE MACHINERY and STOCKS, of different kinds.

Offers will also be received for the PURCHASE of the ESTATE of TRANSY, consisting of about 107 imperial acres, with elegant MANSION-HOUSE and PLEASURE GROUNDS, situated about half a mile to the east of the town of Dunfermline.

Applications may be made to Mr. Talbot, manager of the works; or to Johnstone, Russell, and Craig, writers, Dunfermline.

Dunfermline, March 15, 1850.

IRON-WORKS, SOUTH STAFFORDSHIRE.—TO BE LET, with immediate possession, the FACTORY IRON-WORKS, situate on the upper level of the Birmingham Canal, in the parish of TIPTON. The greater part of the works are newly erected, and the whole most substantial and complete. The machinery of the best description, and laid down on the most approved principles of the day.

These works are comprised of two forges, with boiler, plate, and sheet mill, and large and small merchant iron trains. They are in full operation, and can turn out 150 tons of iron weekly: have every convenience both as to water and land carriage, and are surrounded by good collieries.

For further particulars, and to treat for the same, apply to Messrs. Bourne and Wainwright, solicitors, Dudley.

LEAD MINES TO BE LET—the LEAD MINES of FEE DONALD, situated in the MINING DISTRICT of STRONTIAN, ARGYLLSHIRE.—The ORE is a good SULPHURET, yielding, by correct analysis, 87 per cent. of lead. There are several veins which have been partially worked, and hold out encouraging prospects of success; they are favourably situated for free levels, and a stream (important for washing the ore, &c.) flows across them. An easy road, a few miles in length, will convey the produce to Loch Sunarb, an arm of the sea (western ocean), whence it may be transported to any part of the United Kingdom.

The district has been surveyed by Mr. Rise, lecturer on mineralogy; and for further particulars application may be made to Messrs. Inglis and Burns, W.S., 16, Queen-street; Mr. Alex. Rise, mineralogist, 2, Drummond-street, Edinburgh; and Mr. John Watson, Rector, Strontian, Argyllshire.—Edinburgh, March 13, 1850.

COPPER MINE FOR SALE, IN CANADA EAST, near QUEBEC.—The *Canadien* says—"That a copper mine has been recently discovered near Sault Marie (Nouvelle Beance), in the seigniory of M. Perrault, about 30 miles south of Quebec, and 3 or 4 miles from the River Chaudiere. Metallic veins, varying from 1 foot to 4 feet wide, have been followed, and examined, in the space of 1000 feet in length. There has also been found a vein of argentiferous lead, encouraging the supposition that the vein of silver is not far off. The mine is not far from where gold is found on Mr. De Lery's seigniory."—The above most valuable PROPERTY is now OFFERED FOR SALE, BY PRIVATE CONTRACT.

Further particulars may be obtained by addressing (pre-paid) Madame Perrault, Pilton House, Barnstaple, Devon; or to O. Perrault, Esq., Montreal, Canada East.

JUNSTON IRON WORKS, NEAR SHEFFIELD.—Messrs. RANGELEY, WRIGHT, and Co. invite the attention of IRON MANUFACTURERS, IRON FOUNDERS, &c., to their DERBYSHIRE PIG-IRON (smelted entirely with coke), which they can with confidence recommend for all purposes where purity of metal, combined with tenacity or strength, is an object. The No. 3 pig-iron is sufficiently fluid for all descriptions of foundry-work. PIPING may be cast in this quality will admit of almost any amount of hydraulic pressure. As a mixture with tender irons, or for purposes requiring great strength, their No. 4 is particularly adapted. For FORGE PURPOSES, the loss from waste in cinder, &c., is much below the usual average, and the product a very superior iron.

Messrs. R., W., and Co. also beg to inform RAILWAY CONTRACTORS, ENGINEERS, GAS and WATER-WORKS COMPANIES, BUILDERS, MILLWRIGHTS, &c., that having purchased an extensive assortment of models and apparatus from Messrs. Wm. Graham and Co., of Milton Iron-works (who have declined business), and having engaged experienced workmen from that establishment, they are in a position to furnish ALL DESCRIPTIONS OF CASTINGS, suitable for the above branches, and at moderate prices.

MINERAL PROPERTY.—TO BE DISPOSED OF, a valuable MINERAL PROPERTY, in the centre of the mining district of CARNARVONSHIRE, within 3 miles of the Lisburne Mines. The lodes of the adjacent mines run through the property, which contains upwards of 110 acres, with the right of working minerals on an additional extent of 500 acres beyond that cited as surface, which would be disposed of with the mineral rights. There is ample water-power, and the feeble supply of the soil, with minerals, will be disposed of by the proprietor.—Particulars may be acquired on application to Mr. Henry English, 25, Fleet-street, London.

A FEW SHARES in a RICH SILVER-LEAD MINE to be DISPOSED OF.—Applications to be made to Mr. Durrant, 58, Lombard-street.

ASTURIAN MINING COMPANY—IN LIQUIDATION.—Notice is hereby given, that the MONTHLY BALANCE-SHEETS of the Company, to the 31st of December, 1849, and to the 31st of January last, prepared subject to the pending investigation, are now in COURSE of DISTRIBUTION. The abstracts of the accounts remain at the Company's offices at Mieres and in London for inspection.

By order of the Board of Directors and Liquidators,
9, Austinfriars, London, March 26, 1850. K. MACKENZIE, Secretary.

ASTURIAN MINING COMPANY—IN LIQUIDATION.—Notice is hereby given, that the SPECIAL GENERAL MEETING of this Company, held the 26th day of March inst., has been ADJOURNED, and that the said ADJOURNMENT will be HELD at the Company's offices, 9, Austinfriars, London, on Tuesday, the 16th day of April next, at the hour of One o'clock, for the completion of the business for the transaction of which the said meeting was convoked.

And Notice is also given, that the TIME for RECEIVING TENDERS for the PURCHASE of the COMPANY'S PROPERTY, as heretofore advertised, is EXTENDED to the 12th day of APRIL, and that in case there shall be a *bona fide* and sufficient tender, the property will be disposed of without reserve.

CHARLES CUNINGHAM, Chairman pro tem.
9, Austinfriars, London, March 27, 1850.

TO THE PURSER OF LAMHEROOE WHEAL MARIA.—We, the UNDERSIGNED, adventurers in the above mine, hereby request you to CONVENE a SPECIAL GENERAL MEETING on Thursday, 4th of April next, at One o'clock precisely, to be held at the offices, as usual, for the purpose of making an extra call, which has become imperatively necessary, in consequence of the expenses of working the mine being much increased by the recent discovery of a valuable tin lode, and on other business. Signed by shareholders holding 450 shares.

Offices, 4, King-street, Cheapside, March 28, 1850. JAMES CROFTS, Secretary.

COMBMARTIN AND NORTH DEVON LEAD AND SILVER SMELTING COMPANY.

REGISTERED UNDER THE JOINT-STOCK COMPANIES' ACT.

The SMELTING-WORKS of the above COMPANY are in ACTIVE OPERATION.—SAMPLES of LEAD and SILVERY ORES are requested to be forwarded to Captain Cornelius Bawden, Combmartin, near Ilfracomb, North Devon.

Payment for ores by bill, at three months, or cash if required.

Combmartin, Jan. 1, 1850. THOMAS L. WILLSHIRE, Secretary.

CARADON VALE MINE, SAINT IVE, NEAR LISKEARD, CORNWALL.

Pursers—Mr. John Stephens, St. Ive, Liskeard; Mr. Charles Collins, Exeter.

Bankers—Mr. Sanders, Exeter; the Devon and Cornwall Bank, Exeter and Liskeard.

This mine is situate in the parish of SAINT IVE, near LISKEARD, CORNWALL, and was worked upon by several poor experienced miners a short time since, to develope that which they felt convinced existed there—viz., rich copper ore. They drove an adit 70 fms. to hill, and sunk a winze 12 or 15 fms. under that adit to cut the lode, when to their dismay they were completely impeded by the large quantity of water issuing from the lode, they having only water-barrels to draw up the same; sufficient was, however, seen to know that rich yellow and black copper ore existed against the cross-course. There are seven lodes, well defined, and carrying the most extraordinary gossan that can be seen, with rich peach, prian, felspar, and ore, and every other qualification to convince miners that great riches exist beneath.

It is proposed that the mine be divided into 1536 shares, at FIVE SHILLINGS PER SHARE, being the first deposit, and the liability of each shareholder is not likely to exceed £4 per share, as it is not expected more than £1 per share will be required. The calls, too, are moderately fixed, not to exceed 5s. per share every two months.

A large number of the shares are already taken up.

Application for the remainder may be made to Mr. Thomas Sanford, Exeter; Mr. John Stephens, St. Ive, Liskeard; Mr. Edward Suter, Exeter; Mr. James Timewell, Exeter; Mr. John Seymour, St. Cleer, Liskeard; and Mr. Henry Vatcher, Exeter.

To the Committee of Caradon Vale Mining Company.

Gentlemen,—I beg to state that I have visited this mine, and have much pleasure in offering you my observations upon it. I find that one lode only is opened on by a shode pit, where it presents a most flattering appearance, being composed of very rich gossan, felspar, quartz, and beautiful white prian. The strata is a soft clay slate, and very congenial for mineral. I have not the least doubt but that this lode will be found productive when explored. No practical miner can dispute the favourable appearance of the lode. There are several lodes farther north, but only one has yet been wrought on, and that only to a small extent; this lode is driven on about 15 fms. west, and about 8 fms. east from the adit, which came in about 12 fathoms from surface; the lode in the western end is about 4 feet wide; I consider it to be an extraordinary lode. I never saw one more promising at such a shallow level; it is composed of gossan, being impregnated with rich black oxide of copper, spots of yellow copper, blue peach, felspar, and mundic; it also carries a small flookan on the foot wall. A cross-course in the western end intersects the lode, and the backs are all corroded over with copper greens, which indicates that the lode, as well as the strata, is most completely mineralised, and I have no doubt but that the lode will prove very productive, both east and west of the cross-course. At a few fathoms deeper there is a shaft sunk, about 14 fathoms under the adit, and a crosscut driven, and the lode cut by means of a cross-course, which let down a great deal of water; and, from the want of machinery, the poor miners, who worked at their own expense, were obliged to abandon it, without having cut through the lode, so as to develope its size or quality. I consider the mine to be a most promising investment, and all who engage in it cannot fail to be rewarded richly for their enterprise; the mine, from its situation, can be worked easy, and at a small outlay. JOHN SPARGO.

Downgate, Stoke Climsland, Dec. 18, 1849.

PETER TAVY AND MARY TAVY CONSOLS COPPER MINING COMPANY.

Capital £2500, in 5000 shares, of 10s. each.

CONDUCTED ON THE COST-BOOK SYSTEM.

Directors.

HENRY GIBSON, Esq. | THOMAS FULLER, Esq.
JOHN CREFT, Esq. | WILLIAM WILSON, Esq.

Bankers—London and County Joint-Stock Bank.

Secretary—Edward Underhill, Esq.

PROSPECTUS.

PETER TAVY and MARY TAVY CONSOLS is a COPPER MINE, lying next adjacent to the well-known Wheal Friendship, which has been a most profitable investment, returning upwards of £300,000 to the adventurers, and is at the present time paying large dividends. The lodes are a continuation, running through the Peter Tavy and Mary Tavy Consols—for which see the reports furnished by gentlemen whose practical experience and ability in mining operations is undisputed.

Although the capital stated above may appear small, it is pronounced by competent and experienced miners to be ample, taking into consideration that upwards of £12,000 was laid out by the late Company, which stopped, owing to the difficulties of the largest shareholder, just as they were beginning to pay—all the benefits of which are secured to this company; therefore, it is confidently expected, that, if worked with spirit, considerable profits must be made before the end of the year, it being evident, from the geological situation, and mineral district of this mine, and by driving the adit east and west, a large quantity of rich ore will be produced, as the mine is favourable to the production of copper, being near the junction of the granite and killas, and on the run, or course, of the Wheal Friendship lodes.

Report of J. H. Hitchins, Esq., *of the Devon Great Consols.*

At the mine I met Captains Phillips and Dunn, and surveyed the whole of the sett and the adjoining property, with a view to ascertain how much of the latter it will be desirable for the company to obtain, in addition to what they already are in possession of. It appears, from the measurement this day made to ascertain the extent of the company's sett, that it is in length, from one extreme point to another, lineally, on the course of the lode about 600 fathoms, and in width about 250—that is the eastern side of the River Tavy. On the western side of the river the sett is less comprehensive, the length of it being about 100 fathoms, and the width about 50 on the underlay of the lode.

In viewing the sett generally, I have only to remark, that I consider it one possessing advantages of more than ordinary character; and as a mining investment, as good as any can be. The lode at present in the adit end, now driving east of the River Tavy, being the large masterly one of Wheal Friendship Mine, which has proved so profitable to the adventurers, from 4 to 5 feet wide, intermixed throughout with gossan, mundic, copper, peach, prian, and all the other characteristics in the term, kindly.

In the locality of Peter Tavy and Mary Tavy Consols are the following mines:—Great Wheal Friendship, which has divided upwards of £300,000 among the adventurers; Devon Great Consols, about £220,000 during the last five years; Bedford United, about £5000; Wheal Crebor made a profit of £35,000, and has now resumed working after a suspension of 21 years; Crowndale, and several mines in the immediate district, were worked with vast profit to the adventurers; Wheal Anderton, East Crowndale, Devon and Courtenay, Plymouth Wheal Yeoland, and Wheal Russell, at the present time, are being worked under the most promising circumstances; whilst to the south-west will be found Tamar Consols, South and East Tamar, in a most profitable position. The promoters of the Peter Tavy and Mary Tavy Consols merely mention the above mines, to show that the sett is in a highly mineralised district; and when it is considered that the average of capital invested in the Devon and Cornish mines return dividends at the rate of 12½ per cent., the above may be fairly pronounced to be a first-rate adventure.

OFFICES—No. 18, CORNHILL, LONDON,

Where the books, reports, &c., and specimens of the ore raised, may be seen.

IMPROVED WIRE ROPE.—The UNDERSIGNED, in tendering their best thanks for the liberal support they have hitherto received, respectfully solicit attention to the vast IMPROVEMENTS which new machinery and attention has enabled them to effect in the MANUFACTURE of ANDREW SMITH'S PATENT WIRE ROPE, more particularly his FLAT ROPE, which they can now produce of a description far superior to any previously offered to the public.

WILKINS & WEATHERLY.

Patent Wire Rope Works, 39, High-street, Wapping, London.

PARSEY'S COMPRESSED AIR LOCOMOTIVE.—Mr. PARSEY invites the attention of Directors, Engineers, and Proprietors of Railways to this ECONOMISING INVENTION, by which half the present number of engines will be sufficient—their durability wonderfully increased—the cost of repairs decimated, and other savings made to improve the profitable returns of capital on the working expenses.—Information given at No. 455, Oxford-street, where the ENGINE may BE SEEN in ACTION on TUESDAYS and FRIDAYS, from Two to Four o'clock.

TO GAS APPARATUS MAKERS, IRONFOUNDERS, &c.—The Directors of the BRISTOL AND CLIFTON GAS-LIGHT COMPANY, Limekiln-lane, Bristol, are desirous to RECEIVE TENDERS for TWO CAST-IRON PURIFIERS, 10 feet by 12 feet by 4 feet each, with VALVES, SIEVES, and CONNECTIONS complete, to be erected at their works as above, in accordance with plans and specifications, which may be seen at the office of the Company, Bristol; or at the office of Thos. G. Barlow, Esq., C.E., 32, Bucklersbury, London. The tenders must be delivered at the office of the Company, Bristol, on or before Wednesday, the 10th day of April next ensuing.—Dated Gas-Light Office, Limekiln-lane, Bristol, March 15, 1850.

TO PROPRIETORS OF STEAM GENERATORS.—WALLACE'S ANTI-EXPLOSIVE INDICATOR shows the exact height of the water in the boiler, and gives an alarm when the water gets too low. It is approved and recommended by the most eminent engineers in London; and no boiler is safe without it.

For particulars, address 27, Graham-street, Macclesfield-street North, City-road.

TO COPPER SMELTERS.—A PARTY of TWELVE MEN, consisting of REFINERYMEN, FURNACEMEN, and SMITHS, well acquainted with their business, are ready for an ENGAGEMENT either at HOME or ABROAD. The highest reference given.—Apply by letter (post-paid) to "R. R.," office of the *Mining Journal*, 26, Fleet-street, London.—March 28, 1850.

WANTED, in a Manufacturing Business and Iron Trade, a PARTNER, who can command from £6000 to £8000, and who may be actively engaged or otherwise. The business is well established, and in full operation, yielding good profits, and capable of considerable improvement.—Communications, addressed to "A. B.," 25, Basinghall-street, London, will have prompt attention.—None but principals will be treated with.

WANTED EMPLOYMENT, by a young man well acquainted with Mining and General Business. Security and reference can be provided.—Address "B.," at the office of the *Mining Journal*, 26, Fleet-street, London.

RUNNAFORD COOMBE MINE.—An excellent opportunity is now offered to any PERSON wishing to PURCHASE SHARES in the above valuable concern. Mr. CHENHALL has a FEW SHARES to DISPOSE OF, at £4 per share.—Apply to Mr. Chenhall, 4, King-street, Woolwich.

STEAM-ENGINE FOR SALE.—An HORIZONTAL ENGINE, with cylinder 9½-inch diameter, large iron condensing chest, boiler, about 21 tons, feed-lift, &c., quite a complete machine, as good as new, having only worked two or three months, with a very light load, and, with application of a winding drum, would be well adapted as a steam-whim and pumping engine.—Further particulars and price may be obtained on application to L. Newton, jun., auctioneer, &c., Camborne.

VALUABLE MINING SETT, at GAZELAND, in the parish of ST. NEOTT, CORNWALL, to be GRANTED for TWENTY-ONE YEARS, where old workings were formerly carried on with success, and where the lodes have been developed.—For particulars, application may be made to Messrs. Commins and Son, solicitors, Bodmin.—Dated Bodmin, March 19, 1850.

MINING OFFICES, 3, GEORGE-YARD, LOMBARD-STREET, LONDON.—Mr. T. P. THOMAS is a BUYER of SHARES in Wheal Seton, North Pool, Treviskey and Barrier, Condurrow, South Wheal Frances, South Basset, South Tolgus, Trelawyn, Mary Ann, Tolcarne, Tincroft, East Pool, Pendarves Consols, Lisburne Mines, Esgair Llec, and West Wheal Treasury; and is a SELLER in Penzance Consols, Bedford, East Gunnis Lake, Cook's Kitchen, Carn Brea, Wheal Comfort, Gustavus Mines, Nanteos, Camborne Consols, Court Grange, Bwich Consols, Stray Park, Tryphena, Wheal Margaret, Wheal Owls, Providence Mines, and South Trelawny.

T. P. THOMAS is generally in a position to BUY and SELL at close market prices, and he will be happy to give information as to prices, &c., upon application.

MINING PROPERTY.—Mr. HERRON has SHARES in the best DIVIDEND MINES FOR SALE, and which will give to the purchaser 17 to 25 per cent. for the outlay; amongst others are the following:—Great Devon Consols, Carn Brea, Wheal Trelawny, West Providence, South Basset, Treviskey and Barrier, Condurrow, Stray Park, Wheal Margaret, St. John del Rey, United Mexican, and Cobre Mines.—Mining Offices, 33, Clements-lane, Lombard-street.

MR. H. B. RYE, GENERAL AGENT for the DISPOSAL of MINING PROPERTIES, invites the attention of his friends and the public to the unusually FAVOURABLE TERMS on which INVESTMENTS may now be made in MINE SHARES. Ample information (for the guidance of buyers) may be had at his offices, 77, Old Broad-street, London.

Mr. RYE is a SELLER of FORTY CWM ERFIN SHARES, at £4 each.

MR. T. A. READWIN, MINING OFFICES, 2, *WINCHESTER-BUILDINGS, OLD BROAD-STREET, LONDON.*

MR. C. S. RICHARDSON, CIVIL ENGINEER, LAND AND MINING SURVEYOR.
No. 15, OLD BROAD-STREET, LONDON.

MR. GEORGE BATE, Jun., CIVIL ENGINEER AND SURVEYOR, *WOLVERHAMPTON.*

Offices in Queen-street, corner of Piper's-row.

N.B.—UNDERGROUND MINING SURVEYS accurately executed.

JAMES LANE, MINING SHARE DEALER, 80, *OLD BROAD-STREET, LONDON.*

BRITISH AND FOREIGN REGISTRY OFFICE.—PARTIES having MINERAL ESTATES, COLLIERIES, or MINES, FOR SALE, or SHARES TO DISPOSE OF, in DIVIDEND MINES, or OTHERS, by enclosing a list of the number and price of such shares, and particulars of such property, the same will be registered for sale, and commission charged only on sales taking place.—Money advanced if required.—Apply to Mr. DURRANT, 58, Lombard-street, London.

BAROSSA RANGE MINING COMPANY.—Notice is hereby given, that the ANNUAL GENERAL MEETING of the proprietors of this company will be HELD at No. 13, Bedford-row, London, on Tuesday, the 2d day of April next, at Twelve o'clock at noon precisely. COODE, BROWNE, & KINGDONS.

London, 13, Bedford-row, March 25, 1850.

CAMBORNE CONSOLS MINING COMPANY—NOTICE TO SHAREHOLDERS.—Notice is hereby given, that a SPECIAL GENERAL MEETING of the shareholders in this Company will be HELD at the Company's offices, 22, New Bridge-street, Blackfriars, London, on Monday, the 8th day of April next, at One o'clock precisely, for the following purposes—viz.: To consider and determine the expediency and mode of raising additional capital, in order to extend the works on the mines, or of winding up the affairs of the company: to modify the qualification of the Directors, and to elect and appoint one or two new directors, if the shareholders should find it advisable so to do; or to reduce the number of the Directors necessary to constitute a board; also, to appoint a Committee of Consultation, to meet monthly, or bi-monthly, on the mines, and to define the functions and powers of such committee.

H. L. T. VON USTER, Secretary.

22, New Bridge-street, London, March 19, 1850.

THE KINZIGTHAL MINING ASSOCIATION, 1, Adelaide-place, March 21, 1850.—The THIRD GENERAL ANNUAL MEETING will be HELD at the offices of the Company, 1, Adelaide-place, London-bridge, on Saturday, 29th April next, at One o'clock precisely. GEO. COPELAND CAPPER, Sec.

TINCROFT MINING COMPANY.—Notice is hereby given, that the ANNUAL GENERAL MEETING of the shareholders in this company will be HELD here on Wednesday, the 10th day of April next, at Three o'clock precisely.

Salvador House, March 13, 1850.

UNION TIN SMELTING COMPANY.—Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of this Company will be HELD at this office on Wednesday, the 10th April next, at Two o'clock precisely, when the half-yearly statement of the company's affairs, to the 31st Dec. last, will be submitted, and a dividend declared. P. WATSON, Secretary.

Salvador House, London, March 8, 1850.

PENNANT AND CRAIGWEN CONSOLIDATED LEAD MINING COMPANY.—Notice is hereby given, that, in pursuance of a resolution, passed unanimously at the General Meeting of shareholders, held on Tuesday, the 19th ult., all SHARES on which there were ARREARS OF CALLS have BEEN FORFEITED, and the number, consequently, has been reduced to 6201 shares. Certificates for the same, duly numbered from 1 to 6201 inclusive, have been issued, and henceforth all transfer of shares, without certificates, will, therefore, be invalid.

Any shareholder who should have failed to receive a printed list of the present proprietors is requested to communicate with the purser.

57, Threadneedle-street, March 12, 1850. WM. W. MANSELL, Acting Purser.

Proceedings of Public Companies.

MEETINGS DURING THE ENSUING WEEK.

THIS DAY ....Wheal Courtenay Mining Company—offices, at Twelve for One.
Rosherville Pier and Botanical Gardens Company—London Tavern, Two.
TUESDAY.....Barossa Range Mining Company—offices, at Twelve.
Galvanised Iron Company—London Tavern, at One.
WEDNESDAY ..South Wheal Josiah—Queen's Head, Tavistock, at Three.
Guadalcanal Silver Mining Association—offices, at Two.
South Metropolitan Gas-Light and Coke Company—London Tavern, Two.
India and London Life Assurance Company—offices, at One.
THURSDAY ....Wheal Sophia Mining Company—at the mine.
Mining Company of Scotland—offices, at Twelve.
London Joint-Stock Bank—offices, at Eleven for Twelve.
Commercial Gas Company—London Tavern, at Twelve.
FRIDAY .....Pontop and South Shields Railway—offices, at One.

[*The meetings of Mining Companies are inserted among the Mining Intelligence.*]

PROFESSIONAL LIFE ASSURANCE COMPANY.

The annual meeting of this company was held at the offices, Cheapside, on Wednesday last. Major HENRY STONES in the chair.

The CHAIRMAN observed that brevity was said to be the soul of wit, and he was sure it was the soul of business. It was pleasing to him to see again so many old faces, and still more delightful to see so many new ones. After saying this much, he would request Mr. Winter to read the advertisement convening the meeting.

The advertisement having been read, the CHAIRMAN said, this was the time when, properly speaking, the chairman ought to make his address. He would claim their indulgence, as he was suffering under one of the most intense headaches. The report was so full, so complete, and so satisfactory, that he thought the best comment upon it would be to request that it be read, without saying anything more upon the subject.

Mr. BAYLIS (the actuary and manager) then read the following

DIRECTORS' REPORT.

At this, the third general annual meeting of the shareholders, the directors cannot fail to express their high satisfaction at the continued and successful progress of the company. A brief examination of its career will best manifest its past and present position, and explain the foundation upon which the directors base their expectations of its enduring prosperity. From the first moment of the establishment of the institution, the directors considered it due to the public, to the assured, to existing shareholders, and to themselves, as also essential to the full and active development of the many valuable and universal principles of the institution, to invite and secure as wide and influential a proprietary as possible. They were well aware that, owing to the monetary embarrassments of the times, and the jealousy with which, not unwisely, every new office of the kind was watched and weighed, the task undertaken by them in this respect was laborious and discouraging in the extreme. Strong, however in the belief that the real merits and capabilities, peculiar to this corporation, required only to be known and understood, in order to be adequately appreciated and substantially supported, they persevered, through good report and evil report, in their fixed determination to realise a numerous, productive, and responsible body of shareholders. The result, they rejoice to state, has surpassed their most sanguine expectations, and more than recompensed them for all their exertions. The list of proprietors exceeds, at the present time, 1200 names; a number, they believe, unapproached in the annals of life assurance, by any similar society, however venerable or distinguished. The directors are naturally disposed to infer that the rapid subscription, year by year, to the capital, by parties resident in all quarters of the British Empire, attests, in a striking and irresistible manner, the high value attached by the community to the institution as an investment. The number of names added to the Deed of Settlement in the year 1847 was 73; the number of shares appropriated 7450. In the year 1848 140 names were added, and 4305 shares distributed. In 1849 the accession of names was 1036, with an issue of 24,550 shares. While, from the 1st of January last to the present time, 272 names have been subscribed to the deed, and 2515 shares allotted. Thus, in this short period, have the entire number of 40,000 shares, which constitute the capital of the company, been almost totally absorbed.

The directors announce results like these to the meeting with unmingled satisfaction; results which indicate not only that the desire to participate in the great and peculiar advantages of the investment is universal, but, what is more important than all, that the company is now established, upon a broad and substantial basis. In the accomplishment of this great object, the directors have endeavoured faithfully, and to the letter, to realise the intentions and wishes of the extraordinary meeting of shareholders, held on the 5th June last, for the purpose of increasing the number of shares to supply applicants, and to afford an opportunity to others to avail themselves of the advantages of original proprietorship.

The real and material business of the corporation—namely: the accumulation of income from assurances, to the attainment of which every other effort and intention must necessarily be but preliminary and subservient—has, the directors are gratified to state, advanced with equal progress and certainty. The number of policies effected in the year 1847 was 69, yielding premiums to the amount of 571*l.* 9s. 2d. In 1848 the number of policies issued was 161; the amount of premiums received 1850*l.* 10s. 1d. In 1849 the number of policies completed was 293; the income from premiums 3553*l.* 4s. 8d.; while from the 1st of January last, 82 policies have been granted, creating an annual revenue from new premiums of upwards of 1000*l.* The total income of the company, at the present time derived from premiums, after deducting assurances, lapsed by deaths and other causes, amounts to upwards of 5300*l.*; the total number of policies issued is 605; and the amount assured 178,380*l.*

On reference to the balance-sheet, to the 31st of December last, as approved and audited, and this day laid before you, and which the directors refer to as part of this report, it will be found, much to their regret, that, owing to the prevailing epidemic of the past year, the losses by death have far exceeded the usual average. The total losses by deaths from the commencement of the company amount to 3972*l.* 19s. 11d. These claims, however, have been all promptly met and satisfied, still leaving a large credit to the premium account, exclusive of a sum accruing to the company by the death of an annuitant.

The directors consider that the above results are such as cannot fail to stimulate the friends and well-wishers of the institution to promote its best and lasting interests, by every exertion in their power. They feel assured that the principles which it involves—principles peculiar and important, identifying the interests of the living with those of survivors—of making not only policies of assurance the means of securing independence to representatives, but also, if needs be, policies of assurance against want, from whatever causes arising, whether from pecuniary embarrassments, from accidents and casualties, or from afflictions bodily and mental, will, in due time, elevate it to a most distinguished rank, and enable it to accomplish the greatest possible good for all concerned, individually and collectively.

It is again the pleasing duty of the directors to recommend to the shareholders that a dividend, after the rate of 5 per cent. per annum (free from income tax), on the paid-up capital of the company, to the 31st of December last, should be declared, according to the provisions of the Deed of Settlement of the company; and such dividend is hereby declared accordingly. The following gentlemen retire as directors by rotation, viz.:—Jacob Montefiore, Esq; Capt. Edward Nash Norcott, R.N.; and Major Henry Stones,—and, being eligible, offer themselves for re-election. A vacancy in the direction having occurred, by the retirement of Lieut.-Col. Cameron, the directors have much pleasure in recommending to the shareholders Andrew Durham, Esq., of London, Bath, and Belfast, a duly qualified shareholder, having given the requisite notice as a candidate for election as a director; and they do this in the perfect confidence that, from the influential position and extensive opportunities of that gentleman, the interests and welfare of the company will be materially promoted.

Capt. Alexander Hamilton Earle, R.A., having sent in his resignation as a director of this company, the same has been accepted; and the board do not at present recommend the vacancy to be filled up. The directors have also to submit for the confirmation of the shareholders a contract which they have entered into with Edward G. Winthrop, Esq., one of your directors, for the purchase of the unexpired term of the lease of the house and premises now in the occupation of the company; and from the stability and increasing prosperity of this institution, the directors consider the proposed purchase advantageous, and, therefore, recommend its confirmation by the proprietors. The auditors who retire by rotation, are Charles M. Elderton, Esq., and F. Woollatt, Esq., who, being eligible, are recommended by the directors for re-election. The directors would also wish to call the attention of the proprietors to the important list of highly respectable medical referees and agents, whose valuable influence they feel will operate most beneficially for the extension of the business and benefits of this corporation;—whose continued and energetic exertions they beg, with the utmost cordiality, to acknowledge, and from which the directors anticipate the most certain and beneficial results. In conclusion, the directors express their unabated confidence in the triumphant success of this great institution, and their firm conviction that, by a zealous co-operation of its extensive, highly important, and influential connections—including its assurers, its shareholders, its medical referees, its agents, its friends and well-wishers—the invaluable principles of this company will be largely promulgated and adopted; and that each succeeding year will demonstrate a prosperity as pre-eminent as its usefulness is incalculable.

Mr. BAYLIS read the balance-sheet, copies of which were laid upon the table.

The CHAIRMAN said that, in moving the adoption of this report, he would make a few remarks, which, indeed, he might do on every paragraph of that able document, and with very considerable satisfaction to all. He would leave this duty to his friend, Mr. Heseltine, on account of the indisposition under which he suffered. He had to complain that the society had suffered by calumny; but were they "pure as snow, and chaste as ice, yet they would not escape calumny." It was true that they had been assailed, but they were not injured. There was one good object obtained by this sort of calumny, because it gave them the opportunity of refuting it; and this discussion served oftentimes for an advertisement, besides that, in this case, the evil recoiled on the heads of their adversaries. The chairman concluded by again moving the adoption of the report.

Mr. BERMINGHAM seconded the motion. He had watched with considerable interest the birth of this institution, and its progress since had been so highly satisfactory, as made it quite a gratification to him to have belonged to it. The prosperity which this office had attained in so short a time was not, perhaps, equalled by any other assurance office. It had been founded by their able actuary on sound principles, and this would not only insure its progress, but preserve it from decay. The seed was now sown, the spring time was past, and they now only waited for the season to come to gather in the fruits to gratify their appetites.

Mr. HESELTINE made an able speech, during which he more particularly dwelt on the financial position of the company. This office had only been in existence (said he) for three years, and all its preliminary expenses had been defrayed. The total number of shares issued and taken up by respectable members was 39,000. They had 1400 proprietors, and had issued 605 policies; the amount of income now derivable from premiums being upwards of 5300*l.* He concluded his observations by saying that they were bound to look back in gratitude for the past, and might look forward with hope and certainty for the future. (Hear, hear.)

Mr. WILLIAMS made some humourous remarks on the aspersions thrown out against this society by the *Law Times* and the *Scottish Reformers' Gazette*. He was not ashamed to have only paid 10s. on his shares, and hoped he should not pay any more. They had 1400 proprietors, 500 agents in all parts, and 500 medical men belonging to this company, being together 2400; this formed the basis of the stability of their society, in addition to the principles laid down by the skill of their able actuary, Mr. Baylis. He hoped they would continue to merit the envy of their sister assurance companies, as proved by these calumnies; and he only hoped they should never want their pity.

Some observations were then made on the accounts, and the merits of the society, by the Rev. Mr. Mummery, Mr. Vanheems, Mr. Teulon, Mr. C. Elderton, Mr. Hardy, Mr. Thompson, Mr. Colborne, Mr. Worth, and others.

The report was adopted unanimously.

The following directors were then re-elected—viz.: Jacob Montefiore, Esq., Capt. Norcott, R.N., and Major Henry Stones; and Andrew Durham, Esq., was elected a new director unanimously. C. M. Elderton, Esq., and Frederick Woollatt, Esq., were re-elected auditors, and their salary awarded.

A motion was made for the increase of the pay to the directors; but the CHAIRMAN thought it more advisable to let that be deferred till they gave them an increased dividend. (Applause.)

Votes of thanks were then passed to the directors, auditors, and medical officers, for their services. A vote of thanks was also passed to the actuary and manager (Edward Baylis, Esq.), and to Mr. Winter (chief clerk), unanimously.

Dr. BARKER returned thanks on the part of the medical officers.

Mr. W. COOPER made the following observations:—He might be permitted, as it fell within his province, to draw attention to a fact, which was not without interest or significance. The deaths which had taken place among the assured had not been from the development of the seed of insidious disease, nor from the decay of nature, but from causes which no human foresight could guard against, nor human skill avert. Strong men had been smitten down by acute disease, and individuals, in the pride and vigour of life, had been carried off, with scarcely a moment's warning. Nor had their list been left unmarked by that dreadful scourge which so recently spread desolation over the land; at least one "cholera widow," as she might be emphatically called, was now in the enjoyment of the provision made for her here by the foresight of her husband whilst living. All right-minded persons must rejoice that the office had been the means of conveying comfort, if only in one instance, to that which would otherwise have been a straitened as well as a desolate family; and as the prosperity of this office increased, and its resources became developed, so would its means of alleviating misery be enlarged. (Cheers.) So far as the success of the Professional Company depended on the care and attention of its medical officers, he spoke the sentiments of his colleagues and himself, in promising that their best efforts would ever be directed to further its objects and promote its interests. (Cheers.)

Mr. BAYLIS (the actuary and manager) returned thanks, and said he felt proud at the progress the company was making in public estimation, as it was the first which had been started on the same principles, it being, in fact, in advance of the age—providing for the wants of the assured while living, as well as securing to their representatives a competence at their decease. (Cheers.) He had suffered great anxiety and annoyance in carrying out the objects of the company; and, however highly he appreciated the compliment which they had just paid him, he felt that, if he had not been actuated by a higher motive than that of securing their thanks, he never could have undergone it. (Cheers.) He might be allowed to draw attention to the fact, that great ends were not generally to be obtained without great means. (Hear, hear.) They had heard a great deal about the amount of the printing expenses; but he was sure, if the proprietors reflected for a moment on the number of tables the book contained (21), and considered the number of individuals of every profession to whom it was desirable to send it, that these expenses would not be considered excessive, especially as their operations extended to every colony of the British empire, from Van Diemen's Land to the River Thames. Their prospectuses were being circulated in the Cape, Van Diemen's Land, Canada, and America, and he trusted that the result would be that, before the close of the year, they would double their income. (Cheers.) They had now 1300 proprietors, and 750 agents, or medical men, connected with them, above 100 of whom had been appointed within the last 12 months, and the whole of whom it was necessary to furnish with prospectuses, placards, &c., which, of course, added to their expenses, though he could assure them that the directors had watched the expenditure of every shilling with the greatest jealousy. (Cheers.) One thing had given him a great deal of annoyance, and caused him a great deal of anxiety—viz.: people not understanding the true state of the affairs of the company; and many persons had written to him for information, as though the office were thoroughly insolvent. (Hear, hear.) He thought that it would only be necessary to remind those parties that they possessed 1300 shareholders, with a subscribed capital of 250,000*l.* A call of only 10s. per share had yet been made—and he did not believe another would be necessary—producing 20,000*l.* (Cheers.) All the shares, with the exception of about 600, had been taken up, and an offer had been made for them only the previous day. Now, a call upon 40,000 shares, at 6d. a share, would produce 1000*l.*, and if the directors did find it desirable to make a call, as there were five sixpences in half-a-crown, such a call would at once give them the control of 5000*l.* (Cheers.) He should oppose the making of any call as long as possible; but, if it should become necessary, could it be supposed that, with a list of 1300 proprietors, there could be any difficulty in meeting the whole of their engagements? The principles upon which the company was formed were so comprehensive that, independently of life assurance, they provided against every accident which could befal an assurer, either by railway or other cause, and they also provided against the dispensations of Providence—such as an assurer being afflicted with blindness or paralysis. (Cheers.) He had devoted a great deal of time and anxiety to promote the interests of the company, which was intended, not for wealthy men, but to enable those to make a provision for themselves and families, whose livelihood depended upon the exercise of those talents which God had given them; and if his own breath was stopped, all that he possessed was gone. (Hear, hear.) He had said that he should never be incapacitated while working for that company; but he had reflected on the observation, and assured his life under table 21. (Hear, hear.) He considered that it was a duty they all owed to themselves and their families to assure their lives; and if they did not do so within the next year, he should accuse them of not having done their duty. (Cheers.) He confidently expected that every 10s. paid upon their shares would become worth 30*l.*, as they would not be swamped by having a too large paid up capital. The Globe Office had 1,000,000*l.* paid up, and he need not remind them how much it required to pay 6 per cent. on that amount. Another office had 500,000*l.* paid up, which never could be required to meet the claims against them. (Hear, hear.) He considered that this company possessed so many elements of good, and that their connections were so scattered, that they must flourish. (Cheers.) In conclusion, he begged again to thank them for the very kind manner in which they had proposed the vote of thanks to him, and he hoped that the whole of the proprietary would long continue in the enjoyment of good health. (Cheers.)

The meeting then agreed to the proposition for the purchase of the remainder of the lease of the premises, 76, Cheapside, for the sum of 2000*l.*, by which a saving of 138*l.* in the annual rent would be saved to the company.

A vote of thanks was passed to the chairman, when the proceedings of the day terminated.

VAN DIEMEN'S LAND COMPANY.

The 25th annual meeting of this company was held at the office, Great Winchester-street, City, on Thursday, the 28th instant.

JOHN CATTLEY, Esq. (the governor), took the chair, and said that they had been called together, according to custom, to receive the annual report of the directors, which the secretary would read; and then the accounts, copies of which were on the table, in respect to which he should be happy to give any explanation in his power. The board had endeavoured, because they considered it the most straightforward and honest plan when so much depended on the reports of their agent (15,000 miles distant), to give whatever they communicated in his own words, as far as possible.

The advertisement was then read by the SECRETARY.

The CHAIRMAN said, as the last report involved the forfeiture of certain shares, the resolution in that respect had better be read first, as it must be confirmed by this meeting.

The resolution for the confirmation of the forfeiture was agreed to unanimously.

The SECRETARY then read the report, which stated that—

The company's title deed had been executed by the Lieut.-Governor, and duly registered in the supreme court of the colony, from which it had since been received in this country. They were now able to grant conveyances of land and leases, which would be accordingly completed as soon as the proper forms should have been decided upon by the company's legal advisers. The present reports, transmitted by their chief agent, were very encouraging, and the directors thought it better to refer to Mr. Gibson's own despatches for the requisite information. When the leases expired on the 1st of March, 1850, a further extent of 754 acres, upon the peninsula of Circular Head, would fall into the company's hands, which had been divided into four farms; and, as there were comfortable residences on each of them, with suitable farm-buildings, fences, and a considerable extent of cultivated land, it was expected that from 12 to 15s. per acre, as a yearly rent, would be realised for the whole. From a letter, bearing date the 26th of April last, it appeared that one of the company's tenants, on the main land, had become the purchaser of his own farm, and of one adjoining, to the extent of 320 acres. The purchase money, at the stipulated price of 2*l.* per acre, amounted to 640*l.* Sixty or 70 acres of uncleared land had been let at the annual rent of 5s. 3d. per acre. It appeared that not a single tenant was likely to leave his farm at the end of the leases, and claim the bonus from the company upon the cleared lands; and, notwithstanding a year of very general depression and difficulty in the colony, there appeared favourable results, both as regarded the increase of inhabitants, and the general condition of the settlements. A comparison with the returns of 1848 exhibited an increase in the population of 38 souls (although the company's servants had decreased). The land rented exceeded what had been taken at the corresponding period in the former year, by 628 acres, and there was increase of 465 acres in the area of the land cleared, all of which evidenced a satisfactory proof of steady progress in the advancement of the establishment. The tenantry were, with a few isolated exceptions, perfectly contented, and gradually assuming a comfortable and independent position. A vessel of 30 tons burden had been built last year, and another of about 40 tons was upon the stocks. There were several applications for farms from various parties in the colonies, as well as from others at Melbourne and Adelaide, and there was every prospect of the company letting the remaining sections on the peninsula on very favourable terms. A steam company had just been projected, for the purpose of running a first-class vessel between Launceston and Melbourne, calling at such intermediate places as might offer sufficient inducement, one of which would be Circular Head; and substantial advantages were expected to be realised by this company from this new mode of intercourse. The wool received last year from the company's estates was 84 bales, and the net return produced at public auction was 989*l.* 18 2d., after payment of all charges. The future prospects of this company appeared very cheering, and their agent had expressed very sanguine hopes that the period would shortly arrive when the income of the company derived from the letting of land, the sale of stock, &c., would not only be equal to its expenditure, but afford a surplus. Still the directors could not feel confidence in naming the precise time for this result, until the accounts with the tenants, whose produce was taken at fixed prices, should have been finally settled. These agreements expired on the 1st of the present month. Instructions had been given to their chief agent to reduce that branch of the establishment relative to the breeding of horses, which had been absolutely necessary in the infancy of the undertaking. The breeding and maintaining cattle was much less expensive than that of horses, and, from the great increase in demand for meat in the colony, it appeared that the sales of the company's stock were yielding a fair profit. In 1847, the number of cattle sold was 58, and the amount received 238*l.* 17s. 4d., while in 1848 the number sold was 423, and the amount realised 1416*l.* 9s. 6d. Their agent's drafts upon the company, since the last general meeting, had amounted to 749*l.* 6s. 10d. In anticipation of these drafts, a call of 1*l.* per share had been found necessary, and was made in July last; and the amount thus raised had enabled the company to meet all their engagements. With respect to the financial position of the company, it was impossible to state what might be the exact probable amount required for the ensuing year; but the directors had requested their agent to furnish them immediately with the most complete estimate as to the probable future expenses and claims upon the company.

The CHAIRMAN said he had the pleasure to state that their affairs at the present moment were gratifying to the directors—at least, more favourable than they were formerly. It had been a subject of complaint here frequently about the heavy drafts the proprietors were liable to, in consequence of the agreement made seven years ago, in order that settlers might come on their land, to take their produce at fixed prices, but the period of that contract was now past. The agreement expired on the 1st of this month, but it would be some time before they got at the result. In anticipation of this, the directors had been doing all they could to make the expense as little as possible, by inducing tenants to grow corn instead of potatoes, so that the loss they would be still liable to under the agreement to take the produce of 1849 would be much less than formerly. (Hear, hear.) Their agent (Mr. Gibson) had been exercising the most rigid economy in everything, and the directors had also been careful not to expend one shilling more at home than could be avoided. Notwithstanding the servants of the company had been greatly diminished, yet the population on their property had been increasing. He thought there was hardly an exception to the well-doing of every man on their lands, so that if the proprietors gained nothing, it was at least a gratification to them to know that every man on their property was going on prosperously. (Hear, hear.) As to the finances of the company, they had heard at the last meeting that about 7000*l.* was expected to be drawn on them by Mr. Gibson, and the accounts were pretty much in the same state at present. They had 5070*l.* at their bankers, and upwards of 2000*l.* still due on calls; against which there were engagements of about 4300*l.*, accepted payable at their bankers; what would be required beyond would not exceed the money at command. He hoped before their next meeting the proprietors would see the good effects of the new plan, and, consequently, an end of their present embarrassments.

The Rev. Mr. YATES was happy to see in the report the circumstance, that a first-class steamer was to call at Circular Head, and that an hotel was to be erected at the cost of 2000*l.* or 3000*l.*, which was a sign of increased population and traffic on the property of the company. (Hear, hear.)

Mr. RICHARDSON considered that the shares of the company would never be worth anything till a committee of inquiry was appointed, and concluded his observations by a resolution to that effect.

Mr. PALMER asked if the directors had availed themselves in any way of Mr. Sidney Herbert's plan of emigration?

The CHAIRMAN said, the disproportion of the sexes was not to that extent as to need it, but he dare say wives would be acceptable there as well as anywhere else.

Mr. BEAL, Mr. WEEDON, Mr. WILSON, and others, made some observations as to the amendment.

The CHAIRMAN, in reply to a proprietor, said that the tenantry at present consisted of 397 males, 111 females, and 248 children. They were mostly men with their wives and children who had settled there; and, according to their excellent clergyman, there was no better or more moral population in any of the rural districts of the mother country.

A long discussion then took place as to the amendment.

The CHAIRMAN said, he must oppose it, as it would be a reflection on the board of directors that they had not done their duty. He had been connected with the company for 25 years, and had lost hundreds by it—he might say, thousands—thinking it would eventually be profitable; out of which time, 16 or 18 years of labour had been devoted to their affairs, without pay, on the part of the directors. After that long period, the proprietors, of their own accord, awarded amongst the whole board, 300*l.* a year, in consideration of their services. Now, after this, to be told that their integrity was doubted—for that was the object of the inquiry—was more than he could bear, as well as his co-directors. The gentlemen who proposed this thought, perhaps, there were some fine pickings for the directors, or that they did nothing for their 300*l.* In respect to the first, he would say that there was nothing to be got; and, as to the other, if the proprietors gave them no longer the 300*l.*, he should not grumble.

Mr. MARSHALL (deputy-governor) said, the proprietors could revoke that 300*l.* a year.—Mr. RICHARDSON persisted in putting his resolution, but it was lost by a large majority.

The report was then adopted unanimously. A vote of thanks was passed to the chairman and directors, and the meeting separated.

CLARENCE RAILWAY COMPANY.—The annual meeting of this company was held on Tuesday, at the George and Vulture Tavern, when the chair was taken by HENRY BLANSHARD, Esq.; but as the proceedings were of a private nature, our reporter was not admitted. We understand the report was withdrawn, and the meeting adjourned to the 25th of June.—The resolutions will be found in our advertising columns.

ACCIDENTS.

Terrific Colliery Explosion in Belgium—Seventy-five Lives Lost.—A most frightful occurrence has just taken place at Mons, of which we have obtained the following particulars:—It appears that the number of workmen in the mine at the time of the accident was 85; 11 only were able to save themselves, and they were seriously wounded, the 74 others being all killed; 46 bodies have been recovered, and, from the state of the mine, there is no hope that any of those remaining will be got out alive. The part of the mine where the other workmen are known to be has not been penetrated, on account of the foul air it at present contains. One workman has lost his life in the attempt to render assistance. As soon as the communications, opened by the explosion between the working part and the winding ladders, have been carefully stopped, and other precautionary measures have been taken, which, it is expected, will be completed to-morrow, the unexplored part can be reached, and the other bodies recovered. It is not known how the catastrophe was caused; it cannot be attributed to impudence, as the utmost care was used, and safety-lamps employed. The greater number of the bodies recovered present evident marks of death having been caused by suffocation, and not by burning. The quantity of foul air was so great that two horses, which were placed at the entrance of the mine, and where the ventilation was always good, were suffocated. What renders the occurrence the more unfortunate, is the fact that the whole of the men who have perished belonged to no provident society, and obstinately refused, in spite of the most earnest pressing to connect themselves with one. Several eminent engineers are now on the spot ready to render all the assistance in their power in directing the operations of the workmen.

Tredegar Iron-Works.—Through the carelessness of one of the puddlers (who was throwing a small quantity of water into his furnace), picking up a small piece of cinder in his ladle, the whole of the brickwork, barring, and grate bars also, were completely blown away—nothing being left but a few of the outside cast-iron plates. The man was but slightly hurt.

Dukinfield.—As Joseph Cheetham was working in the Victoria pit (the property of Messrs. Swire and Lees), a stone, about 2½ tons weight, fell from the roof, killing him upon the spot.—While the jury were sitting in the above case, a similar accident occurred in the same pit to John Hodson, who had just finished his week's work, and was putting his clothes on, when a stone of similar weight fell upon him. He was got from under as soon as possible, and lived until Sunday afternoon, when he expired.

Tividale, near Dudley.—T. Hately was killed by a fall of about 3 tons of the mine, while engaged in cutting coal down a pit belonging to Messrs. Wagstaff and Skidmore's colliery.

Bilston.—Samuel Hodgkiss was killed in Mr. W. Shale's pit at the Bats Croft Colliery.

Willenhall.—James Dainty was killed by a large quantity of clod and stone suddenly falling upon him during the time he was "holing," with several other men, in the hollows of a stone pit at Addenbrook field, Darlaston.

Derbyshire.—A singular accident, attended with consequences of a fatal nature, occurred at the Calow ironstone pits. Two brothers, William and Joseph Lowe, had entered a corf for the purpose of descending the pit, into which several other men had just before been safely lowered; when they were drawn up to the pulley-wheel, although the engine was not then at work, and whilst in this dangerous situation, a sudden jerk threw them out of the corf down the pit—a distance of 27 yards, both being instantaneously killed. It appeared, from evidence at the inquest, that the pit is connected with the engine by a chain which works it; this chain passes over a road, and at the time the two brothers got into the corfe a horse and cart were crossing the road—the horse placed his fore feet upon the chain, and by the weight of the men it was drawn up to its belly; the horse plunged violently, and by doing so caused the sudden jerk which threw the unfortunate men out of the corf, and caused their death.—*Derbyshire Reporter.*

THE TRUCK SYSTEM.—For the last month or two there have been a great many prosecutions in East Worcestershire and Staffordshire against parties chiefly connected with the coal and iron mines of that district for paying their workmen in truck. The war against the system has been taken up by gentlemen and tradesmen of Dudley, Wolverhampton, Walsall, Wednesbury, &c., and a great many convictions have taken place, which it was thought would have a very salutary effect. Another case has, however, just been tried at the last-named place with a different result. The defendant in this case is a butty collier, named Thomas Lawrence, and he was defended by Mr. Serjeant Allen, who succeeded in showing that the tickets given to the complainant were in the form of checks, and thereupon it was contended that this was a legal payment, authorised by Act of Parliament, and the magistrates dismissed the case.

NORTH BRITISH RAILWAY.—On the last arch of the Roxburgh viaduct being completed, in a few days, there will be a passage across the Teviot, at a height, it is stated, "hitherto only attainable by the feathered tribe."

Transactions of Scientific Bodies.

MEETINGS DURING THE ENSUING WEEK.

MONDAY	Entomological—17, Old Broad-street	8 P.M.
	Chemical—142, Strand	8 P.M.
	Medical—3, Bolt-court, Fleet-street	8 P.M.
	Pathological—21, Regent-street, Waterloo-place	8 P.M.
TUESDAY	Linnæan—Soho-square	8 P.M.
	Horticultural—21, Regent-street	3½ P.M.
	Civil Engineers—25, Great George-street	8 P.M.
WEDNESDAY	Society of Arts—Adelphi	8½ P.M.
THURSDAY	Zoological—11, Hanover-square	3 P.M.
FRIDAY	Botanical—20, Bedford-street, Covent-garden	8 P.M.
SATURDAY	Asiatic—5, New Burlington-street	2 P.M.
	Westminster Medical—17, Saville-row	8 P.M.

INSTITUTION OF CIVIL ENGINEERS.

MARCH 26.—WILLIAM CUBITT, Esq. (President), in the Chair.

The first paper read was a "Description of the Chapple Viaduct, upon the Colchester and Stour Valley Extension of the Eastern Counties Railway," by Mr. P. Bruff, Assoc. Inst. C.E. This viaduct was thrown across the valley of the Colne, at Chapple; it consisted of 32 semicircular arches, each of the span of 30 feet, the total length being 1136 feet, and the extreme height, from the foundations to the rail level, being 80 feet. The average height of the piers, from the foundation to the springing, was 45 feet; they were 27 feet 3 inches wide, by 4 feet 10½ inches thick, at the under side of the impost, and tapered downwards to the plinth, with a batter of 1 in 36; 28 of the piers only had plinths, which consisted of a set-off of 2½ inches, making the dimensions of the base of those piers 29 ft. 6 inches wide, by 7 ft. 1 inch thick. The piers were solid below the plinth, but above that level there was a centre opening 6 feet in width, arched at the top and the bottom. The whole of this viaduct was constructed of bricks made in the district, being chiefly set in mortar, but the arches for a distance of 4 feet 6 inches above the springing were set in cement. The viaduct occupied about twenty months in construction, and cost about 55*l.* per lineal yard.

The next paper read was "On the Manufacture of Malleable Iron, with the results of Experiments on the Strength of Railway Axles," by Mr. G. B. Thorneycroft, Assoc. Inst. C.E. It was stated that malleable iron might be divided into two distinct classes, "red-short," and "cold-short;" the former being generally produced from the rich ores, and the latter from the poorer or leaner ores. The pig-iron made from the rich ores (under the cold-blast process only) was not so fluid as that from the lean ores, but when converted into malleable iron it became tough and fibrous, though it was troublesome to work at less than a white heat, which had caused it to be denominated "red-short." On the other hand, the pig-iron produced from the lean ores possessed greater fluidity, but when malleable it was unfitted to support sudden shocks, or continuous strains, and was hence termed "cold-short." It was further stated, that in the manufacture of malleable iron very much depended on the quality of the fuel used in the smelting furnace, and in the subsequent processes; also that iron became crystalline from two causes; first, in consequence of being made from naturally cold-short pig-iron, and secondly, from a peculiar manipulation during the process of "puddling."

The introduction of hot-blast for smelting iron, rendered necessary a careful investigation of the comparative use of hot and cold-blast pig-iron, in the manufacture of bars, from which it appeared, that if the same quality of materials was used in both cases, equally good bar-iron would be produced, though it was more difficult to convert hot-blast pig-iron into "number one" bars, and the waste was greater. It was certain, that whilst good grey pig-iron could only be produced, by cold-blast, from the best materials, iron of apparently excellent quality could be made, by hot-blast, from the most sulphurous ores and fuel; indeed, to this alone must be attributed the bad reputation of hot-blast iron for certain purposes.

As it had been asserted, that the peculiar characteristics of malleable iron were to be attributed to the ore from which it was produced, and not from the different nature of the processes used in its conversion, which the author had always believed to be the true cause, he had, at his works near Wolverhampton, made bars of the finest crystalline, and of the strongest fibrous texture, from the same Yorkshire pig-iron. Another cause which induced great changes in the texture of iron, when cold, was compression, or impact, which would completely alter its texture from a fibrous to a crystalline character, as was well exemplified by the "gag" and the puddling tools used by forgemen, and in several parts of different kinds of machinery the same effect was observed.

The author then proceeded to draw attention to the best shape for railway axles, so as to combine the greatest strength with the least material, illustrating his views by the details of a series of experiments made for determining the question. It would appear, that railway axles should be made parallel, from journal to journal, without any shoulder, and with just sufficient strength to prevent any vibration in rotating. The experiments showed, that an axle without a shoulder was better able to resist impact than one with a shoulder, in the ratio of 155 to 55, and by leaving the axle parallel, its strength, compared with the same sized axle reduced in the middle, was 5 to 1½.

The discussion on this interesting subject was announced to take place at the next meeting, of Tuesday, April the 2d, when the monthly ballot for members would take place, and the following paper would be read, "Description of a Lift Bridge on the Thames Junction Branch of the London and Brighton Railway," by Mr. R. J. Hood, M. Inst. C.E.

IRON, HARDWARE, & METAL TRADES' PENSION SOCIETY.

A meeting was held at the London Tavern on Wednesday last, for the purpose of receiving the report of the committee as to the progress of the above institution during the past year.—THOMAS BRIDGE SIMPSON, Esq., treasurer, and one of the vice-presidents, in the chair.

The minutes of the last meeting having been read, the statement of the present position of the institution was presented to the assembly. It appeared from this that the balance in hand in 1848 was 37*l.* 11s. 9d., and that the receipts were, during the year, from all sources, 1255*l.* 9s. 10d.; and that the expenditure, during the same period, was 1122*l.* 7s. 2d.—leaving 133*l.* 2s. 8d. in the hands of the treasurer at the present audit.

Mr. NOTTAGE, in the absence of the secretary (Mr. Thomas Hawkins) read a report of the proceedings of the society during the past year. One of its most interesting points ran as follows:—"The present year opened with engagements to the pensioners to the extent of nearly 600*l.* per annum. However desirous of another liberal election in May next, your committee have not deemed it prudent that more than three additional pensioners should then be placed upon the books, notwithstanding the vacancy created by the recent death of Mr. Henry Hinton. This decision is, however, the result of no despondency, but from the necessity imposed upon them by the rules of devoting the whole of the first year's subscriptions of new members, as well as the donations, to the augmentation of the permanent fund. But for this, the prospects of the society would justify a continuance of the elections on the same scale as those of the year now past. The visit of Mr. G. S. Nottage, a member of your committee, to Sheffield, as a deputation, on behalf of the society, has resulted in the acquisition, from that place alone, of fourteen new subscribers of half a guinea; twenty-nine, one guinea; eleven, two guineas; three, three guineas; and two, five guineas per annum. In addition to which, eleven previous subscribers of one guinea have doubled their subscriptions, and donations have been given to the amount of twenty-six guineas, making a total of 119*l.* 14s., of which 27*l.* 6s. is in donations, and 92*l.* 8s. in annual subscriptions. Such a response from Sheffield to the appeal of the first deputation that has been despatched from the committee warrants the hope that similar results will follow the visits contemplated to Birmingham, and other important towns; and hence, although the coming election is for a comparatively small number, that for November will probably afford evidence of the amplitude of your means, and the expansiveness of your benevolence."

Mr. H. L. TAYLOR moved, and Mr. C. A. PRELLER seconded, the adoption of the report, which was carried unanimously.

Mr. WOOLTORTON moved, and Mr. RIDGE seconded the motion, that thanks be given to the Right Hon. Viscount Lewisham, M.P., for his kindness in having consented to take the chair at the annual meeting, to take place in April next.

Auditors for the ensuing year having been appointed, the vacancies which had occurred in the committee were filled up, and thanks to the treasurer were unanimously voted, upon the motion of Mr. H. L. TAYLOR, seconded by Mr. GOSLETT.—Thanks were also given to G. S. Nottage, Esq., for his persevering exertions in promoting the objects of the society during the past year in Sheffield; to Mr. Hawkins, the honorary secretary (with an expression of condolence on the cause of his absence); and to the chairman, when the meeting separated.

IRISH DIAMONDS—THE DUNGIVEN CRYSTAL.—This singular specimen of the minerals of Ireland, which is in the possession of Mr. Hausburg, Liverpool, is remarkable in many respects—for its natural brilliancy, for its extraordinary magnitude, and for the singular circumstances attending its discovery. These crystals generally weigh a few ounces, sometimes reaching as many pounds, but seldom exceeding that limit, while the Dungiven specimen is of the enormous weight of 77 lbs.! It is named from a village in the county of Londonderry, in the neighbourhood of which it was discovered, imbedded in the mountain stream of Finglen, about 1769, by a labourer, when returning from his work. When not worn by the action of the water, these crystals present the beautiful object of a hexagonal prism of six sides. The hexagonal form of this one can be distinctly traced, although it has been broken. It is mentioned in Mr. Shaw Mason's *Collection of Parochial Surveys* in 1814, and is referred to in Lewis's *Topographical Dictionary* (article "Banagher"), as well as by several other writers, as the "Dungiven Crystal."

GASES FROM THE BLAST FURNACE.

We are this week enabled to lay before our readers engravings of the mode adopted by the Ebbw Vale Company, at their Ebbw Vale, Victoria, and Sirhowy Iron-Works in South Wales, for collecting and using the gases from blast furnaces. At these works there are 11 furnaces in blast, making from 1400 to 1500 tons of pig-iron per week; the five blast-engines have 25 boilers attached to them. At present 19 of these boilers, with the gases applied to them, get sufficient steam to work the engines to their maximum duty, *without using coal.* The pumping-engine at Sirhowy Works is worked also by the use of the furnace gases. Last week the gases were applied to several hot-air stoves, and they are now preparing to apply the same to the calcination of iron stones, moulders' stoves, and other purposes.

The present depressed state of the iron trade, and the loss sustained in carrying it on, requires the most rigid economy; and we are pleased to be able to give publicity to the energy and enterprise the Ebbw Vale Company have displayed in bringing into extensive *practical* operation these most important savings.

The Ebbw Vale Company already save 1000 tons of coal per week by these means. We are also informed Messrs. Darby are using these gases at their works in North Wales most successfully.

Fig. 1.

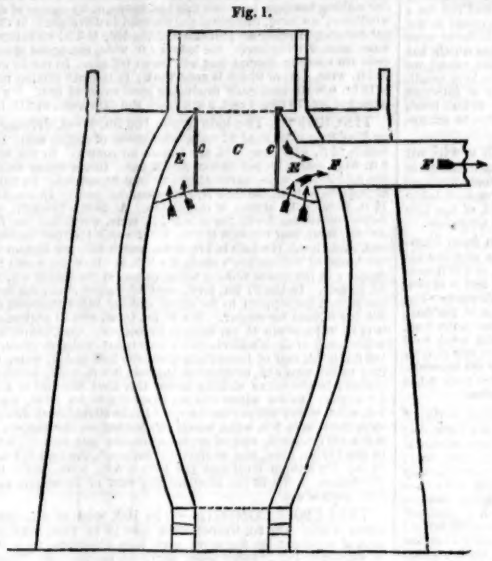


Fig. 2.

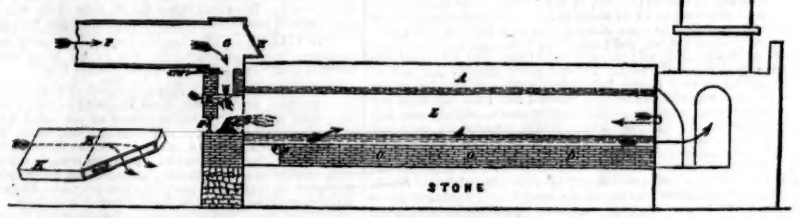
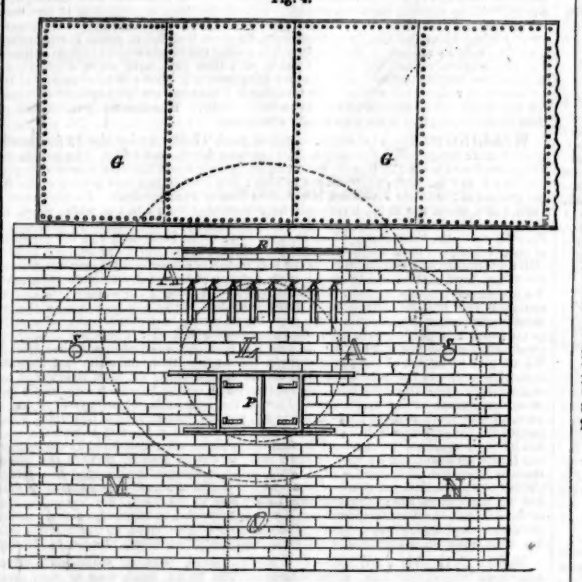


Fig. 4.



DESCRIPTION OF DRAWINGS OF GAS APPARATUS.

Fig. 1 represents a section of a blast-furnace, of the usual description, within the top of which is introduced and fixed a cylinder, or tube, C, by which an annular chamber, E E, is formed round the inside of the furnace to receive the gases. This tube is made of common boiler-plate, ⅜ or ½ inch thick, with 3-inch angle-iron rivetted round the top, forming an outside flange, which rests upon the cast-iron ring usually placed on the top of the furnace immediately under the charging-plate. The diameter of this tube should be about 12 inches less in diameter than the inside of the furnace at the top, and the depth of the same 6 to 7 feet. A little fine dust thrown round the angle-iron after the tube is lowered to its place makes a perfect joint; and thus far all is complete. An orifice is made through the brickwork of the furnace, in which is inserted the pipe, F, for conveying the gas from the annular chamber to the place of combustion.

Fig. 2 is a section of a tubular boiler; A F is the pipe, and G is a box resting on the brickwork, and into which the gases are brought previous to entering the tube of the boiler. H is a slanting door, for the purpose of cleaning the tubes, as well as safety in case of explosion, when it is forced open (thereby preventing injury to the flues, &c.), and falls to its place by its own gravity; K is a box or burner, made of thin sheet-iron, and bevelled off at one corner, as in the drawing; the opening being 9 in. by ⅜ in. for the purpose of admitting atmospheric air in thin sheets to consume the gases, the top of which is placed level with the top of the tube. The gases pass from the box, G, to the entrance of the boiler-tube, L, where the air is admitted through the burners, K K, and the whole ignited by means of a little fire placed at the entrance, and inside the door, P (care should be taken by preparing this fire some short time before bringing the gases down, and it will be well to keep a very small quantity of fuel always burning, more particularly when the gases from one furnace only are used). Combustion then takes place in and through the tube, L, the side flue, M (see fig. 3), and back along the flue, N, to the stack. The brickwork, O, supports the boiler, but is not continued to the end, in order to form a communication between the side flues, M and N.

Fig. 3.

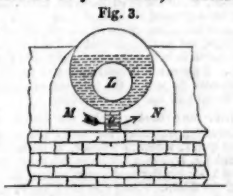


Fig. 3 is an end section of boiler and flues.

Fig. 4 shows the front elevation of the brickwork, sheet-iron box, G, the door, P, the stop, R, for shutting off the gases when the boiler requires cleaning, &c., and the mode of placing the burners, K K, so that the air and gases may mix as much as possible previous to ignition. S S are holes left in the brickwork opposite the side flues, to enable the combustion of the gas to be seen.

CORNISH STEAM-ENGINES.

The number of pumping-engines reported for the month of Feb. is 26—the quantity of coals consumed being 2983 tons, lifting, in the aggregate, 28,000,000 tons of water 10 fathoms high—the average duty of the whole is, therefore, 53,000,000 lbs. lifted 1 foot high by the consumption of a bushel of coal.—The following have exceeded the average:—

Mines.	Engines.	Length of stroke	Load in pounds.	Load per sq. inch on pist.	Strokes per min.	Consump. of coal in bus.	Millions lifted 1 foot by consump. of 1 bush. coal	Mills. lifted by 1 c. coal.
Wh. Tremayne	36-inch	9·0	26,123	19·9	11·0	1890	53·8	64
Great Work	Leed's 60-in.	9·0	55,343	15·2	7·8	2472	61·9	74
East W. Crofty	Frevenson's 80	10·33	82,333	12·2	7·0	4040	54·3	65
Carn Brea	76-inch	8·25	84,657	14·7	4·1	2072	54·1	64
Poldice	Sims's 85-inch	10·33	77,545	9·5	12·0	6056	55·4	66
S. Wh. Frances	75-in.	11·0	54,367	10·0	5·7	2400	60·7	72
United Mines	Taylor's 85-in.	11·0	96,921	15·5	6·7	4544	72·5	86
Ditto	Cardoza's 90-in.	9·0	100,682	13·8	7·7	5504	56·1	67
Ditto	Eldon's 30-inch	9·0	13,631	16·0	8·4	675	64·4	77
Ditto	Loam's 85-inch	10·0	87,947	11·6	7·8	4803	54·6	65
Ditto	Hocking's 85-in.	10·0	97,817	14·4	7·6	5686	55·9	66
Tywarnhayle	Gardiner's 80-in	10·0	75,928	12·0	7·7	4170	56·9	68
East Wh. Rose	Penrose 70-in.	10·0	77,003	18·0	4·6	2800	57·4	68
Ditto	Michell's 70-in.	10·0	75,258	17·6	4·3	2450	60·2	72

[Abstract from Browne's *Cornish Engine Reporter*, from Feb. 20 to March 20.]

PUMPING-ENGINES.

Number reported	29
Average load per square inch on the piston, in lbs.	13·1
Average number of strokes per minute	6·0
Gallons of water drawn per minute	6313
Average duty of 18 engines—being million lbs. lifted 1 foot high, by the consumption of 1 cwt. of coals	67·6
Actual horse-power employed per minute	1248·1
Average consumption of coals per horse-power per hour, in lbs.	4·2

ROTARY-ENGINES—WHIMS.

Number reported	20
Number of kibbles drawn	71,662
Average depth of drawing, in fathoms	133·6
Average number of horse-whim kibbles drawn the average depth, by consuming 1 cwt. of coals	54·7
Average duty of 15 engines, as above	18·1

STAMPS.

Number reported	7
Average number of strokes per minute	13·7
Average duty of 5 engines, as above	39·7
Actual horse-power employed per minute	141·7

PUMPING-ENGINES DOING HIGHEST DUTY.

Par Consols	80-inch single	*Millions* 9·98
Fowey Consols	80-inch single	94·0
Great Polgooth	80-inch single	83·0
West Fowey Consols	60-inch single	8·10
Stray Park	60-inch single	74·7
North Pool	50-inch single	74·3
Trelawny	50-inch single	69·6
Tamar	50-inch single	69·6

WHIM-ENGINES.

Fowey Consols	22-inch double	*Millions* 31·2
ditto	22-inch double	30·8
Par Consols	24 & 13-inch Sims's combined	26·7
Great Polgooth	22-inch double	21·8
ditto	22-inch double	20·6
Devon Great Consols	30 and 16-inch Sims's combined	20·4

STAMPING-ENGINES.

Great Polgooth	35-inch double	*Millions* 52·8
Lewis	52 and 28-inch Sim's combined	51·1
South Caradon	26-inch single	48·0

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Bute's West Hartley 15—Buddle's West Hartley 15—Carr's Hartley 15—Chester Main 14 6—Holywell 15 6—New Tanfield 13 6—Ord's Redheugh 12 6—Ravensworth West Hartley 15—Tanfield Moor Bates 13—Townley 13 6—West Hartley 15—Wylam 14 6—Wall's-End Brown 14 6—Elm-park 15 6—Harton 15 9—Hebburn 15—Northumberland 15 3—Original Gibson 15 3—Percy 15—Riddell 14 9—Washington 15—Eden Main 16 3 to 16 6—Lambton Primrose 16 6—Bell 15 9—Belmont 16 6—Braddyll 17—Hetton 17 6—Haswell 17 9—Lambton 17—Russell's Hetton 17—Stewart's 17 3 to 17 6—Caradoc 16 3—Denison 15 3—Heselden 16—Hartlepool 17 6—Kelloe 17—South Hartlepool 16 6—South Kelloe 15 9—Thornley 16 6—West Hartlepool 15 9—Whitworth 14—Cowndon Tees 15 6—Seymour Tees 15 3—South Durham 15 6—Tees 17 3—Derwentwater Hartley 15—Hartley 14—Snapethorpe 15—Sidney's Hartley 15.—Ships at market, 156; sold, 77.

WEDNESDAY.—Buddle's West Hartley 15—Carr's Hartley 15—Holywell 15—New Tanfield 13 6—Ord's Redheugh 12 6—Ravensworth's West Hartley 15—Tanfield Moor 14—West Hartley 15—West Wylam 14—Wylam 14 6—Wall's-End Acorn Close 16—Brown 14 3—Bewicke and Co. 16—Burraton Killingworth 15 6—Hebburn 15—Hilda 15 3—Original Gibson 15 6—Percy 15—Riddell 15 6—Eden Main 16 6—Bell 15 9—Belmont 16 9—Braddyll 17—Hetton 17 6—Haswell 17 9—Jonassohn's 15—Lambton 17—Lumley 16—Russell's Hetton 17 3—Caradoc 16 3—Kelloe 17—South Hartlepool 16 6—Thornley 16 6—Whitworth 14 and 14 3—Adelaide Tees 16 9—Seymour Tees 15 6—St. Helen's Tees 15 3—Birchgrove Graigola 21—Cowpen Hartley 15—Hartley 14—Newport Steam 19—Snapethorpe 14 9—Sidney's Hartley 15.—Ships at market, 94; sold, 67.

FRIDAY.—This day being Good Friday, there was no market.

EXPORTATION OF THE PRECIOUS METALS.—The following are the official returns of the exports of gold and silver from the port of London for the past week:—Silver coin to Rotterdam, 12,000 ozs.; ditto to Mogadore, 4975; bars to Rotterdam 54,000—Gold coin to Mogadore, 40 ozs.—Total silver, 70,975; gold, 40 ozs.

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—The 70 fm. level is driven east of Field's engine-shaft about 15 ft.; the lode in this level is 7 ft. wide, and 3 ft. of the north part is worth 20*l.* per fm. for copper ore, with the appearance of improving as we are driving; the lode in this level west is about 3 ft. wide, kindly in appearance, but not of any value at present. The 60 fm. level west is without change since the last report. The lode in the winze sinking under the 60 fm. level, east of the engine-shaft, is 5 ft. wide, all good saving work for copper ore, worth from 40*l.* to 50*l.* per fm.; the winze is 8 fms. east of the 70 fm. level; in the 60 fm. level, east of the said shaft, the men are breaking about 5 ft. of the north part of the lode; this part is nearly all solid copper ore, worth 70*l.* per fm., and we expect there is still 3 or 4 ft. of the lode south of the part now breaking, which part is looking very good for copper ore. The lode in the tribute pitches over the 60 fm. level, is quite as was expected.

BARRISTOWN.—The new lode, in the 30 fm. level end west, is without alteration, poor; the winze sinking in the bottom of the 30 fm. level, on this lode, is producing about 6 cwts. of lead per fm., and getting larger in depth. In the 30 fm. level east, on the east and west lode, the lode is getting larger, producing 8 cwts. of lead per fm.; we have now driven 4 fms. east on this lode, which leaves good tribute ground in the bottom and back, and the ground clearer from slides than any we have hitherto seen here. In the 30 fm. level end west, which is now in 7 fms., we have a slide which has heaved the lode; this end has gone through good orey ground during the last week; we are stoping the back of this level on a good branch of lead about 4 in. wide, lode small, with blende. In the 26 fm. level end, driving on the new lode, we expect to intersect the east and west lode in another fathom. The Slob shaft is down to the 40 fm. level, and the cross-cut commenced to cut the lode at that depth, which we expect to accomplish in a very short time.

BEDFORD UNITED.—The ground in the 115 fm. level south is without alteration. In the 103 fm. level east we have met with the cross-course up to the point of intersection; the lode produced full 4 tons of good ore per fm.; in the rise in this level the lode is 2½ ft. wide, and yielding some saving work. There has been no lode taken down in the 90 fm. level east; in Bray's winze, in this level, the leader part of the lode is 2 ft. wide, and still worth 25*l.* per fm. The 70 fm. level remains without alteration.

BIRCH TOR AND VITIFER.—We have got a communication from Dunstan's shaft to the old engine-shaft in the 16 fm. level, and have begun to sink the old engine-shaft below this level; the ground in the shaft is good for sinking, and if it continues we shall be able to sink 3 fms. per month; the lode is 18 in. wide, and is as promising a lode as can be seen. We shall begin to sink Dunstan's shaft this week. The lode in the 20 fm. level, west of this shaft, is small, and is at present worth 5*l.* per fm.; we have five new pitches to set on Saturday next if we can have men, three in the back of the 10, and two in the back of the 20, west of Dunstan's shaft. The adit level, west of old engine-shaft, is cleared and secured 65 fms. west. We have not seen any ground in the back or bottom of this level, the lode having been carried away by the ancients. The ground on the cross-cut north of the Birch Tor lode is at present harder than it has been for the last 10 fms. There is no alteration in any other part of the mine.

CARADON WHEAL HOOPER.—This mine is in a progressing state of operation, and is bidding fair to pay the shareholders for their outlay. We have four ends driving by full pares of men—three on the course of the lodes, and one cross-cut in the 60 fathom, level by six men; one in ditto, on the course of Daw's lode, by six men; the lode in this end is large, but poor at present; this end is in the granite, but shortly must reach the killas, where I expect to see a change for the better in the lode, as we have a large orey lode gone down in the killas in the bottom of the 50, and not many fathoms before the present end. The ground in the cross-cut north, in this level, is changed much for the better, and strongly mineralised; we have gone through one small branch in this level, which produced some good quality ore. I expect to cut Dingle's branches in driving about 8 ft. further; there is some rich copper in the branches in the 58, which are about 3 feet apart; should they fall in together, and form one lode, there is a good chance of it being productive of rich copper ore. I believe that this mine will be found to be a rich concern yet, especially on the north lodes, in the granite. The South Caradon C mpany have sunk an engine-shaft on a lode about 80 fms. north of the boundary of this sett, and further east of our shaft; the shaft alluded to is only from 30 to 35 fms. deep; here they have a splendid course of ore, and I believe that their caunter lode, which is about 10 fms. north of our engine-shaft, will prove to be as productive a lode as any one they are now operating on at South Caradon. The end going east, on one part of Pearse's lode, is orey throughout—a very kindly lode indeed; this end promises much in a short time—set this day to drive at 2*l.* per fathom, extent 4 fms.; the lode is all the width of the level—orey throughout, carrying can, rich-looking peach, prian, quartz, &c. The lode in the 50 fm. level east is full 3 ft. wide—a very kindly appearance, composed of spar, peach, prian, killas, and some rich copper ore, rather unsettled, but has two good walls; I think that it will shortly get into a more settled state, there being a large sparry lode in the back of the end, making down as the men advance towards the cross-course. I am led to think that a change for the better will shortly take place in this level. There is one thing I wish to inform the shareholders, that we are doing the right thing to prove the mine—that is, opening on the lodes. We might continue sinking and cross-cutting for everlasting, and then leave a good mine after all.

DEVON AND COURTENAY CONSOLS.—The lode in the end, driving west in the 40 fm. level, is 2½ ft. wide, composed of killas, mixed with white iron, and spots of lead ore. In the 50 fm. level, driving east on the south lode, there is a small leading branch of ore, about 2 in. wide, on the south part of the lode, but the principal part of the lode has not yet been taken down, and a large stream of water is issuing from the lode. The pitches are looking better than last week.

DYFNGWM.—The engine-shaft is now completed to the 32 fm. level, and to get under Tudor's stopes, in the 22 fm. level, a cross-cut of about 5 fms. must be driven. In the 22 fm. level east the lode is producing some very good work, and when the communication with the winze sunk from the adit level is made, good stopes may immediately be set in the back and bottom; there are about 3 fms. more to drive. In the 22 fm. level west, the backs rising against the sink steel ore have improved; Tudor's stopes here will produce 2 tons of lead to the fm. Davies' stopes are producing 1 ton to the fm. In the 16 fm. level we have about 4 fms. more to rise to the adit level; when finished, some profitable stopes may be set, both east and west of the shaft. The adit level, sinking to the 16 fm. level, is worth 1 ton to the fm. In Jones's stopes the lode is 4 ft. wide, producing 1 ton of lead to the fm. The dressing department and other works are progressing as favourably as the frost and snow, which have again set in, will permit.

EAST BALLESWIDDEN.—I have this day inspected the operations in this mine, and am glad to report the prospects are looking very cheering. The men employed in clearing the adit level are progressing much faster than might be expected; they have cleared and secured this level to the flat lode, and they will proceed at once to secure the level to the end. They broke from the backs, yesterday, some very fine stones of rich tin; and from the several reports already made by scientific and practical agents, as well as miners, very important advantages may be fairly expected.

EAST CROWNDALE.—The middle shaft lode is large and tinny, not quite so good as last reported. The 28 fm. level east has during this week gone through good tin ground, but not rich at present; this level in the course of another month will be as far east as Harris's shaft, consequently we shall resume sinking the above at our next setting day, to be down in time to meet the drivage, when we shall have an opportunity of seeing both lodes near the Junction. Our tribute ground looks much as usual. We sampled, on Wednesday last, computed 13 tons, and calculate we have one-eighth of our January and February ores on the mine in leavings, not having materials fixed as yet in Crowndale-field for dressing. Our drawing apparatus is in course of erection, and I hope it will be complete by the end of another month. I expect the offers for our tin in the course of a post or two, when they shall be forwarded to you. We purpose sending off the tin on Tuesday next for Plymouth, in order to save all the time possible.

EAST WHEAL GEORGE.—*26th.*—Since our last report we have been sinking the engine-shaft, which is now down about 3 fms. under the adit; the ground continues favourable, but the water is somewhat quick, which, however, is no bad feature. We are taking out the foundation of wheel-pit, and in a few days the masons will commence operations; the carpenters are at work for smithy and count-house, and the road and bank is complete, and the soil taken off for floors. There has been heavy snow, which has stopped progress at surface.——*28th.*—I was at East Wheal George yesterday, the snow has been very heavy here; the masons have gone to work. I have given orders for all materials and matters connected with the wheel, and getting on with the smiths' work.

ESGAIR LLEE.—As yet we have not succeeded in cutting the caunter lode in the deep adit, east of the cross-course, but we are now driving south for that purpose. The north lode, in the deep adit, west of Morgan's winze, is looking quite as promising as when last reported, being about 4 ft. wide, and will yield 10 cwts. of ore per fm. In the 12 fm. level, west of Morgan's winze, we are driving south, to cut the north lode. The caunter lode, in the 12 fm. level, east from surface, is improved since last reported, being 5 ft. wide, and will yield from 20 to 25 cwts. of ore per fm.

KESWICK.—The ore in the 10 fm. level rise, at Brandley, is about the same as last reported. In the 20 fm. north there is an improvement since last week; in the 20 fm. south we have commenced driving on the vein, in which traces of ore are to be seen. In the 25 fm. sump nothing has been done, owing to the water having risen, from the deficiency of top water for the wheel. In the sump, in Salt level, four men are set to work on tribute, but not much done yet. In the 17 fm. level forehead, at Thornethwaite, the vein is much the same as last week; in the 17 fm. sump, on the vein, the ore continues to improve. The bottom level same as last week.

KINGSETT AND BEDFORD.—The lode south is improving daily; the other parts of the mine much the same. The wheel pit is nearly ready, and the wheel is being put together; the crusher is also in course of erection. We shall begin to crush ore in seven weeks.

KIRKCUDBRIGHTSHIRE.—The lode in the 62 fathom level end, west of Stewart's, is 4 ft. wide, with stones of ore in it, mixed with jack and carbonate of lime, yielding 5 cwts. of lead to the fathom. The lode in the 62 fm. level end, east of Keith's, is still in a barren rock, but the lode in the west end is still improving in appearance. The lode in the 50 fm. level end, west of Keith's, has also improved this week, having had some fine stones of lead in it again. We have got a vessel for the lead, which we hope to ship in the early part of the week.

LEWIS.—In the 80 fm. level, south of sump whim-shaft, from appearances, we are near the south branch. Cock's lode, in the 70 fm. level, east of copper ore shaft, is 4 in wide, worth 5*l.* per fm. The north lode, in the 70 fm. level, east of tin shaft, is 2 ft. wide, unproductive; the rise in the back of this level is holed to the 60, giving good ventilation, and have opened good tribute ground. Cock's lode, in the 60 fm. level, east of sump whim shaft, is 4 in. wide, worth 7*l.* per fm. The south branch, in the 60 fm. level, east of sump whim-shaft, is at present disordered by a cross flookan. In the 60 cross-cut, south from copper ore shaft, the ground is favourable. We expect to intersect Cock's lode in a fortnight. The rise, east of copper ore shaft, on Cock's lode, is holed from the 50 to the 40 fm. level, giving good ventilation; we shall now resume driving each of these levels. The south branch, east of sump whim-shaft, in the 50 fm. level, is 3 in. wide, opening tribute ground. Cock's lode, in the 40 fm. level, west of copper ore shaft, is 4 in. wide, worth 3*l.* per fm. Cock's lode, in the 30 fm. level, east of copper ore shaft, is disordered by a cross branch; in the same level west the lode is 6 in. wide, producing good stones of tin. The 30 fm. level, east of copper ore shaft, on the south branch, has been suspended for some time; supposing the branch to be south, we have cross-cut it about 7 ft., and into it 6 in. wide, worth 5*l.* per fm.; the middle lode east, in the same level, is 3 in. wide, opening tribute ground. We hope to sample about 30 tons of tin on our next monthly sampling.

PENZANCE CONSOLS.—In the bottom pitch, west from Carthew's shaft, there is a good lode of tin, 3 ft. wide; and in the pitch west from Carthew's shaft, on Bayne's lode, the tin lode is 6 ft. wide, good tinstuff, and the lode never looked better than at the present time. The stope, west from the new shaft, is come into good tin ground, and the pitch on the north lode, by eight men, is much improved; a good lode for 4 fms. long, 2 ft. wide. The tributers will rise a good quantity of tin this month; indeed, the mine never looked better than at the present time.

SOUTH WALES MINES.—The south, or Frongoch, lode, in the shallow level, east of the old workings, is at present poor, and I have put the men to sink on the lode where there is a branch of ore about 3 in. wide. I expect we shall cut the lode by the end of this week in the cross-cut north, 12 fms. below the old workings.

SOUTH WHEAL TRELAWNY.—The engine-shaft is in course of sinking below the 50 fm. level by six men, with ground favourable, also composed of a deep blue killas strata; the south cross-cuts are driving east and west of the engine-shaft in the 50 fm. level, by six men in each cross-cut, ground favourable in the western cross-cut, strata just the same as last mentioned—extended from shaft about 10 fathoms; also the eastern cross-cut is a little more favourable than last mentioned. I likewise hinted last week that the eastern cross-cut was extended from the shaft about 6 fms.—I should have said about 8 fms.—it is now 9 fathoms from the shaft. Everything is in a regular course of working.

TAMAR SILVER-LEAD.—In the 205 end the lode is small, composed of capel and mundic, with spots of ore. In the 190 end the lode is 2 ft. wide, producing work of a coarse quality. In the 175 end the lode is 18 in. wide, and opening ground that will set at a high tribute. In the 160 end the lode is 2 ft. wide, 18 in. of which is rich work. In the 145 end the lode is 18 in. wide, 1 ft. of which is work of a promising description. At the north mine, the engine-shaft is sunk 6 fms. below the 80 fm. level; our sinking has been impeded this last fortnight by means of the summen breaking the windbore; we have, therefore, put the men to drive south in the 80 fm. level until we can get one cast to replace it; in this end the lode is 2 ft. wide, interspersed with ore; in the same level, driving north, the lode is 1 ft. wide, composed of capel and ore—both of these ends are opening ground that will set on tribute. In the 70 end, driving south, the lode is 2 ft. wide, 1 ft. of which is good work; in the end driving north, in this level, the lode is 18 in. wide, occasionally producing good cubes of ore. We delivered, last Friday, the parcel of ore, 78 tons 1 cwt. 3 qrs, sold the 12th inst., at 21*l.* 1*s.* 6*d.* per ton.

TINCROFT.—The lode in the 100 fm. level, driving west of Palmer's shaft, on East Pool lode, is 3½ ft. wide, with stones of copper ore. In the 90 fm. level west the lode is 2½ ft. wide, worth 5*l.* per fathom for copper. In the 80 fm. level west the lode is 3 ft. wide, worth 7*l.* per fathom for copper. In the winze sinking below the 70 fm. level the lode is 2 ft. wide, worth 4*l.* per fathom for copper. In the 36 fm. level, driving west of Stainsby's shaft, the lode is 2 ft. wide, but poor. In the 24 fm. level west the lode is 1½ ft. wide, with stones of copper ore. At North Tincroft, in the engine-shaft sinking below the 100 fm. level, the lode is 6 ft. wide, worth 50*l.* per fathom for copper. In the 100 fm. level east the lode is 3 ft. wide, worth 12*l.* per fathom for copper; in the west end, same level, the lode is 7 ft. wide, worth 45*l.* per fathom for copper. In the 90 fm. level, east of Willoughby's shaft, the lode is 4 ft. wide, worth 12*l.* per fathom for tin and copper; in the winze sinking below this level the lode is 5 ft. wide, worth 20*l.* per fathom for copper. In the 90 fm. level, west of engine-shaft, the lode is 5 ft. wide, worth 45*l.* per fathom for copper; in the winze sinking below this level the lode is 6 ft. wide, worth 20*l.* per fathom for copper. The 90 fm. level, east of engine-shaft, on the north branch, is 1½ ft. wide, worth 4*l.* per fathom for copper. On Chapple's lode, in the 110 fm. level, driving east of Cook's Kitchen, the lode is 3 ft. wide, worth 3*l.* per fathom for tin. In the 100 fm. level, east of Downright shaft, the lode is 4 ft. wide, worth 25*l.* per fathom for tin; in the west end, same level, the lode is 6 ft. wide, worth 20*l.* per fathom for tin and copper; in the winze sinking below this level the lode is 4 ft. wide, worth 20*l.* per fm. for copper. In the winze sinking below the 90 fm. level, west of the shaft, the lode is 7 ft. wide, worth 22*l.* per fm. for tin. In the 80 fm. level, driving east and west on Grout's lode, the lode is 7 ft. wide, worth 70*l.* per fathom for copper. On Highburrow tin lode, in the 152 fm. level, east of engine-shaft, the lode is 5 ft. wide, worth 30*l.* per fathom. In the 142 fm. level, east of Martin's east shaft, the lode is 4 ft. wide, worth 18*l.* per fm. In the 132 fathom level east the lode is 5 ft. wide, worth 16*l.* per fathom. At Wheal Providence, in the 43 fm. level, driving west of the engine-shaft, the lode is 2½ ft. wide, with spots of ore.

TRELEIGH CONSOLS.—The 100, west of Garden's, lode 3 ft. wide, with stones of ore. The 90, west of ditto, lode 18 in. wide, with good stones of ore. The 80, west of cross-cut, on the north part, lode disordered by a cross branch. The 70, west of Garden's, lode 2½ feet wide, worth 6*l.* per fm. At Wheal Parent, the engine-shaft below the 40 is sinking in the country north of the lode. The 40 cross-cut south is driving toward the middle lode. The 40, east of the engine-shaft, lode 1 ft. wide, with stones of ore. The winze below the 20, lode 18 in. wide, not much ore. On the middle lode, the adit east of Nicholson's, lode 20 in. wide, with good stones of ore.

TRETHEVY.—The engine-house is nearly erected, and the smiths' and carpenters' shops are completed. The engine is on the mine, and we shall be in full working condition in eight weeks, or perhaps less.

TREVILLE.—The following report of this mine has been received from Mr. John Hitchins, of Tavistock, dated March 23:—My inspection of your sett at Treville, in the parish of Lewanick, has impressed on my mind a very favourable opinion of your property there. The main lode runs north and south, is large, regular, and promising, with unmistakeable gossan nearly all the way in from the mouth of the adit to the end, now nearly 50 fms. into the hill, which rises towards the south. The caunter lode, which runs north-west and south-east, intersects the main lode, and is somewhat different in character, having less gossan, but more spar, and fine stones of lead ore; these form a junction going southward in depth, through a stratum of country decidedly most congenial for the production of minerals, presenting to a practical eye indications which leave no doubt what course of operations to advise; the which is, at once to sink deeper, with a good shaft, in a proper situation, and drive a level therefrom at (say) 12 or 15 fms. from the surface of the valley; this will find the lode, I think, in a settled state, and can be accomplished with great facility and economy, for there is sufficient power to be obtained from the Cargelly stream, as also the Inney, to render you independent of steam entirely. The sett is extensive, and the term 21 years, at 1-15th dues, held under John Wevill, Esq., a most liberal landlord; so that every inducement is offered to fully carry out the necessary operations, the which, when completed, I have not the least hesitation in stating my belief will be attended with a favourable result. You should, therefore, lose no time in developing this more than kindly adventure.

WELLINGTON.—The engine-shaft is sunk 17 feet under the 42 fm. level; ground more favourable for sinking than it has been for the last 3 fms. The lode in the 42 fm. level east is about 1 ft. 6 in. wide, and on the north part there is a branch of copper ore from 6 to 8 in. wide, worth 5*l.* per fathom; this level is just now getting under the ore ground of the 32 fm. level, and is within 14 fms. of Parcelly shaft. Parcelly shaft is sunk 3 fms. under the 32 fm. level—lode for this sinking from 1 to 2 ft. wide, worth for copper and tin from 8*l.* to 16*l.* per fathom. The 32 fm. level is driven 26 fms. east of Parcelly shaft, the lode for the whole distance 15 to 18 in. wide, and, with the exception of about 3 fms., has been worth about 12*l.* per fathom; the lode in the present end looking well; 14 fms. beyond this end there is the best bunch of copper and tin gone down under the 22 fm. level that we had in all the driving of the 32 fm. level, east of Parcelly shaft. We expect very shortly to resume the driving of two or three of our western levels. The ground in the cross-cut, driving north of our new shaft in the adit level, has for the last month been harder than for some time past, but we have a hope that it will alter shortly, as the ground is getting wet; we hope we are near a lode that is between us and our great object on the north, for which purpose this cross-cut was first commenced driving. We are glad to inform all the adventurers in these mines that, since the last meeting, in driving north in the adit level, west of the engine-shaft, we have intersected the engine lode, since which there has been driven on its course 6 fathoms east, and 4 fms. west, also a winze sunk 9 feet under said level; the lode in the winze is 16 to 18 inches wide, all copper of excellent quality, worth 30*l.* per fm.—the sinking of this winze is suspended till the end west is driven on; the lode in the west end is 8 to 10 in. wide, orey, but having just passed through a small cross-course, it is rather disordered for the present, but I have no doubt, ere we have driven 2 fms., it will be good for copper; the lode in the east, driving in this level, is 18 in. wide, and has for the most part of the driving yielded 1¼ ton per fathom, worth 9*l.*—this lode is cut in a beautiful channel of ground, and has the best feature of anything that I have seen in the mine. For the laying open of the different levels on this discovery, it will be necessary to commence sinking a shaft from surface with all possible speed. There is no change to speak of on the north lode. Our tribute pitches are looking pretty well. Our copper sampling this day is 150 tons.

WEST WHEAL JEWEL.—The 85 fm. level, west of Williams's cross-course, on Wheal Jewel lode, is unproductive. The 70 fm. level, west of ditto cross-course, on same lode, not taken down in the past week—when last taken down worth 6*l.* per fm. The 57 fm. level, west of ditto cross-course, on same lode, not taken down in the past week. The shallow adit level, west of Tregoning's shaft, on Tolcarne tin lode, worth 7*l.* per fm. The deep adit level, west of ditto shaft, on same lode, not taken down in the past week. The 12 fm. level, west of ditto shaft, on same lode, is producing stones of tin. The stopes west of Pryor's winze, in the back of the 12 fm. level, on same lode, are worth 23*l.* per fm. The stopes, east of Tregoning's shaft, in the bottom of the 12 fm. level, on same lode, are worth 22*l.* per fm. The stopes, west of ditto winze, in the bottom of same level, on same lode, are worth 24*l.* per fm. These stopes are working on tribute.

WHEAL COURTENAY.—I expect the main shaft will be down to the 20, below the adit level, by the 15th; we shall then cut a plat, and drive to cut the lode next the shaft at that level—we expect to cut it if it keeps the same course as at the adit level, within 5 fms. We have now very good ground in the shaft, very much the same strata of ground as the lode carried with it at the adit level, which gives me reason to think this lode is not far off from the shaft in this level. We shall then have to drive a cross-cut, to cut the east lode, 26 or 27 fms., if it keeps its regular course; if the ground continues as it now is in the shaft, six men would drive the cross-cut 9 or 10 fms. per month. This east lode was the only one seen on the mine while Col. Vyvyan was working it, and, consequently, is the same lode from which the ores were risen and sold. We shall also be opening on the course of the lode near the shaft at the same time we are driving the cross-cut to cut the east lode. Our tributer has not dressed his ores yet; I think he has about 3 tons broken. We cannot expect one man to break a large quantity of ores at so shallow a level as the adit is.

WHEAL CREBOR.—The Georgiana lode is just as last reported, but containing more quartz—a very strong lode. We have opened on the south lode, which is from 3 to 4 ft. wide, impregnated with copper ore; the gossan is very beautiful—indeed, I never saw better. This lode runs all through the sett.

WHEAL LANGFORD.—We have not taken down any ore since I sent you the box of ore, until this morning, and we find the lode much larger, and producing good stones of copper ore. The cross-cut is still very wet, indicating we are near the lode. Our whim will be completed this week.

WHEAL MARY ANN.—The 60 fm. level is driven west of Pollard's shaft, towards the lode, 8 ft., where we have cut a branch, about 1 ft. wide, composed of can and very good stones of lead; and, according to the underlie of the lode in the levels above, we have about 2 fms. more to intersect it. The lode in the 50 fm. level, south of the shaft, is 1½ ft. wide, and will produce 4 cwts. of lead per fm. The lode in the 40 fm. level south is 1 ft. wide, and will produce 3 cwts. of lead per fm. The lode in the winze sinking under the 60 fm. level, north of Barratt's shaft, is 2 ft. wide, and will produce 8 cwts. of lead per fm. In the 60 fm. level, south of this shaft, the lode is 4 ft. wide, and will produce 16 cwts. of lead per fm. The stopes generally are looking well. Our parcel of lead ore, No. 1, computed 93 tons, was sold on Friday last to the Combmartin and North Devon Company, at 18*l.* 17*s.* 6*d.* per ton, and No. 2, 53 tons, to T. Somers, Esq., at 8*l.* 11*s.* 6*d.* per ton.

WHEAL SARAH.—The following is an analysis and assay, by C. Binks, Esq., of the gossan, found in great abundance in this mine:—The gossan is a galena, associated with its usual silicious gangue, and mixed with a considerable quantity of ferruginous clay. It contains sulphuret of lead, oxide of iron, oxide of manganese, oxide of zinc, oxide of silver, alumina, silica, and carbonate of lime. Some portion of the samples contain no appreciable quantity of galena, others are very rich; but taking an average of the whole, the produce of lead is 19½ per cent. Rejecting the clayey portions of the samples that contain no galena, or contain it only in such small quantity as to be valueless, and taking the remainder for examination, along with the richer sample of galena sent, that in picking the ore, as will be done in actual practice in working it, the following is the result:—Produce of lead, 61 4-10 per cent.; silver, 14 oz. 6 dwts. per ton.

WHEAL TRESCOLL.—In the winze, sinking from the 10 to the 20 fm. level, on the B lode, No. 4, there is a splendid course of tin; the men have this morning brought up very large stones of tin from it; this winze is sinking on the course of tin that went down below this level, and will prove the lode from the 10 to the 20 fm. level, as we do not consider the lode we are driving on in the bottom the same as we are sinking on in the winze, but this will prove it in sinking. We have also a very kindly lode in driving east in the 20 fm. level, ground very fair for driving. We are expecting to cut the cross-course every day in this end, which will keep down the water, then we shall be able to open backs north and south, and be able to raise a quantity of tinstuff for the stamps, which will pay well. We have good ground in the south cross-cut, and expect to cut the C lode, No. 2, every day, which I hope will be good, as there was good work in it in the level above. The flat-red shaft is sinking fast in good ground, with a great many branches in it dipping towards the B lode. The engine at this time is keeping the water easy, considering the quantity we have to contend with. All the other work throughout the mine is going on satisfactorily.

WHEAL TRELAWNY.—At Phillips's shaft, in the 82 end north, the lode is 3 ft. wide, worth 12*l.* per fm. In the 82 south the lode is 2 ft. wide, worth 4*l.* per fm. In the 72 north the lode is 2½ ft. wide, worth 10*l.* per fm.; in the 72 south the lode is 2½ ft. wide, worth 4*l.* per fm. In the 62 north the lode is 4 ft. wide, worth 14*l.* per fm. Trelawny's shaft is sunk 6 fms. 4 ft. below the 82—the ground good. In the 82, north of ditto, the lode is 3 ft. wide, worth 10*l.* per fm.; in the 82 south the lode is 4 ft. wide, worth 10*l.* per fm. In the 72 north the lode is 2½ ft. wide, worth 9*l.* per fm.; in the 72 south the lode is 3 ft. wide, worth 10*l.* per fm. At the north mine, in the 55, north of Treluane, the lode and ground are much the same as last reported, and letting go a good deal of water, from which cause it is sinking in the north mine. In the 50, south of Smith's shaft, the lode is 2½ ft. wide, worth 6*l.* per fm. In the 40, north of Smith's, the lode is 2 ft. wide, worth 5*l.* per fm. There is nothing new in the stopes to notice. On Saturday last we sampled two parcels of silver-lead ores—No. 1 crop, computed 101 tons; No. 2, second quality, 38 tons.

FOREIGN MINES.

ALTEN MINES.—Mining report from 3d to 16th February.

Raipas.—Since the date of my last report some of the tribute workings have deteriorated, whilst those in the 20 fm. foot-stope have improved. In Monk's shaft there is a little alteration worthy of remark; we still continue to follow the small branch of ore on the south-west side of the shaft, but hitherto this has not further developed itself. On driving the new levels at the bottom of the mine, we hope to find these veins collected, and forming a large rich deposit. The tribute workings are looking somewhat better, and we expect hereafter to be able to make better returns. We have recommenced with the ore delivery to the smelting-house, but we still experience the same inconvenience as before, in consequence of the severity of the cold, and the great collection of ice on the ford. The weather is now more settled, and we hope to make better progress hereafter.

United Mines.—The workings in the 80 fm. level have again been suspended, owing to the dangerous nature of the ground. At Woodfall's we are driven out by the ice and water, and at Ward's the prospects of the several pitches and levels have undergone no particular change.

Old Mine.—During the last fortnight we have been rather less successful than formerly, and the produce has, in consequence, experienced a falling off. The working on the main lode, towards the north-east, is still very promising, but the ground is hard, and the progress made in exploring the lode consequently very slow. No change is visible in the adit level, but we have every reason to expect an improvement shortly.

Mancur's.—The prospects are looking rather more cheering, and the quality of the returns has somewhat improved; the monthly produce, however, is still much below our expectations.

Michell's.—No further improvement can be noticed in the new sink; the lode in this part is still divided, but promising, and yields a small quantity of good ore. In this working a heave has been intersected, which will probably cut out the lode; but, judging from its appearance, we anticipate no difficulty in finding it again. All the other workings continue as last reported, and the returns are satisfactory.

Carl Johan's.—This lode is rather more compressed and harder than formerly, whilst the returns are deteriorated. Our progress in exploring is somewhat retarded by the unfavourable nature of the ground, but we are still looking forward to an alteration shortly taking place. During the last two months (December and January) the tribute returns has experienced a falling off, and the quality of the produce has at the same time deteriorated. This deterioration must not be attributed to any unfavourable change taken place in the lodes generally, but the dark snowy days and severity of the weather at this season of the year, when the produce, from the difficulty experienced in ore dressing, is invariably found to deteriorate. From this time, however, and unless any unexpected deterioration of the workings take place, we may again expect an improvement.

IMPERIAL BRAZILIAN MINING ASSOCIATION.

Bananal, Dec. 13.—I formerly informed you that I was confident of being able to prosecute this mine to a much greater depth, and hitherto I have seen nothing to shake that confidence. Gibson's shaft is already deeper than Thomas's, and the water is under perfect control.

Gongo.—Should you decide on sending the Capts. Tregoning out, you may rely on my cheerfully doing everything in my power to assist them in carrying out their object; in the mean time, I will use all diligence in the re-erection of Goldsmid's stamps, and the repairs of the others, which are now nearly falling to pieces, the water courses having had a great deal of repairs, and still require more, which shall be attended to. On the 7th inst. I despatched Mr. John Blamey with the mule troop to Rio, taking with him the gold as follows:—

Gongo Soco.....	*Lbs.*	39	11	10	10			
Bananal		26	3	9	0	*Lbs.* 66	2	19 10

after deducting the Government duty of 10 per cent., which was levied on the 5th inst.

I do not expect any regularity of returns until the auriferous bed of Jacotinga is laid open, and the stamps supplied from it.

Dec. 23.—I have great pleasure in congratulating you on the greatest day's produce extracted from here since the mine has been in your possession. On Monday last, some boxes of work were taken from the stopes in the bottom of the 6 fm. level, on the Big Pump vein, which yielded upwards of 20 lbs., besides some very good stones, which have not yet been broken up, and which I suppose contain about 1 lb. more. The vein has been scooped out as deep as we possibly could reach it, and the men are now employed in excavating the surrounding rock, to make room for its further prosecution. We shall not, therefore, be able to work on it again for a day or two, but I sincerely hope to be able, in my next respects, to hand you a similar good account. The stamps, too, have yielded well, which will be seen by the gold returns. These circumstances very materially strengthen the hope I always entertained of profitable results following a vigorous and proper management of the mine. Our different works in the mine are progressing tolerably well, but we find the water increasing in Gibson's shaft, occasioned, I believe, by the late rains, which have fallen very heavy during the last 10 days. We are preparing the new 20-in. pump for this place, which I have no doubt will completely effect the drainage. The captain's report will inform you that the 14 fm. level cross-cut has now reached its destination, and we shall soon commence to rise against Gibbes's shaft; this is a work of importance, and, consequently, will be pushed on as fast as possible. The means we have now for drawing the stuff from the mine is through Thomas's underlaying shaft, and is very defective and expensive.

Gongo Soco.—Here we are getting on with the different works as fast as possible. I have decided on not doing any thing farther in clearing the deep adit, as, from the great difficulty attending it, our progress has been slow and expensive, and I cannot recommend any further attempt to restore it as a drain to the mine, as I have very little doubt of the expense attending it being equal to that of driving a new one; and the mode of working now pursuing can be carried on without much difficulty from the want of this once great auxilliary. We are getting on satisfactorily with the re-erection of Goldsmid's stamps; I hope, if the Captains Tregoning come, they will approve of its site. The open cutting progresses rather slowly, from the great quantity of large rocks we encounter in the work; we have, however, I hope, got through the most difficult part, and I look forward to a more satisfactory progress in future.

Bananal, Jan. 3.—I have great pleasure in informing you that we have again a good 10 days' produce. On Saturday last some boxes of work were obtained from the Big Pump veins, in the bottom of the 6 fm. level, a continuation of the bunch mentioned in my last respects, which yielded upwards of 16 lbs. of gold, as shown in the accompanying gold returns, which also shows the produce for the 10 days to be 22 lbs. 1 oz. 19 dwts., including the stamps, &c.; the specimen taken out on the 19th ult., and alluded to in my last letter, on being broken up, did not yield near as much as I expected. Specimens of gold in jacotinga are very deceptive, the specific gravity of the matrix being very great. The vein has been dug into as far as we could reach it; some days must, therefore, elapse before sufficient room can be made to enable us to follow it further; from its appearance when we left off, I have very strong hopes that the next 10 days' produce will also be tolerably good; these are pleasing symptoms of what we may expect in depth, particularly when backs are laid open on all the different veins, for it must be borne in mind that we are now only working on one vein, and that always considered a secondary one. We have been considerably thrown back in our work during the last 10 days, consequent principally on the Christmas holidays. Our underground work has been also retarded, from a breakage of Walker's long horizontal rods, and which, I fear, will give us a great deal of trouble, as they are in a very bad condition; this, however, can, and shall be, remedied, but it will require some considerable time to put every thing in proper working order. We are making large (24-inch) pumps as fast as we can, but find it tedious and expensive; these, however, call for our first attention, as without them we can do nothing. The iron wheel itself is completed, and looks well; the getting up of the launders to convey the water over it is in a very forward state, but we have yet to prepare bobs and some pitwork; the necessary heavy iron-work for this machine, made by M. Moulevades, is already on the mine, and I have no doubt of being able to complete the whole before her powerful assistance will become necessary. In the captains' report you will observe that the ground in the back of the adit, north of Thomas's, and from whence we have lately been riding some stamping work, is nearly exhausted; this, however, is of little consequence, as the men can be equally as advantageously employed in other parts of the mine. Very little progress, indeed, has been made in sinking Gibson's shaft in the last 10 days, owing to the reasons given by the captains'; the getting down of this shaft to the 24 fm. level is at present our principal object, and I beg to assure you that every exertion shall be brought in action to accomplish it as quick as possible. The water we find increasing as we increase in depth, but we are quite prepared to encounter a much larger quantity than we have at present, or even can expect. In fact, with the assistance of the 20-inch working barrel, now on its voyage here, and the wrought-iron pumps, I am under no doubt whatever of being able to sink the mine to a great depth, as, from what I have yet seen, the surface power, judiciously applied, is ample for all purposes.

Gongo Soco.—I regret the smallness of the produce from here, but the holidays, and some other impediments, have thrown us back a great deal; a shallow part of the open cut has now, however, reached the bed of jacotinga, and we hope for better results, but our stamps are in a wretched state, and not doing half duty. As soon as Goldsmid's is completed, attention will be immediately directed to the other two. In fact, we have made a great deal of preparations already for getting in wood for rings for Walker's and Joinville's wheels, and the large axle which formerly worked at Catta Preta is now on the road to Gongo, with the intention of fixing it to Joinville's wheel, but the heavy rains which have lately fallen here have made the *mere marks* they call roads so extremely bad, as to render its transport rather difficult. Notwithstanding, perseverance and patience will accomplish it. The hammer-mill has been set to work, and the smith is forging some iron-work for the machinery at Bananal. The water-courses are in a much worse state than we expected; we have still a good force employed on them, and I hope it will not occupy many days more to put them in tolerable good order. You will be pleased to observe, that the produce of gold for the last month from both mines is upwards of 60 lbs.

Gold Report.

From Gongo—from Dec. 13 to 20.....	*Lbs.*	2	10	15	0					
,, from Dec. 21 to 31.....		2	0	18	0	—	4	11	13	0
From Bananal—from Dec. 13 to 19.....		20	4	0	0					
,, from Dec. 20 to 23.....		5	8	15	0					
,, Dec. 24.....		0	5	5	0					
,, from Dec. 26 to 29.....		16	5	8	0					
,, from Dec. 30 to 31.....		5	3	6	0	—	48	2	14	0
Total raised	*Lbs.*						53	2	7	0
Total raised from 1st July—Gongo	*Lbs.*	67	3	19	0				

LINARES MINES.—The following has been received from Mr. H. Thomas:

March 16.—Annexed is the account of lead weighed in store this week, in the form of "segunda," or ore in lumps, which will be reduced for transit to England, and be in conformity with the size which the smelters are in the habit of bidding for, and from which only can a fair sample be taken, as we are now preparing for the English market. We have not added to the pile of "primera," although some of the lumps weighed in are very clean, and quite fit for potters' use. We have now a large pile of undressed ore at grass, and are proceeding as fast as we can with washing our "remolidos." It is necessary for the directors to take into consideration that the mode of preparing the ore for market, according to the English practice, is essentially different from the custom here, and that although the hands here are falling into our method as quickly as we can expect, yet that, at first, the course of proceeding is tedious. We have now another jigging hutch ready, and several girls at work bucking and picking. We have set Wilson's shaft to sink 2 fms. on the course of the lode, under the 31 fm. level, at 5*l.* per fm., to three Englishmen, who take with them three Spaniards, exclusive of the payment to their wives in England. They are down 6 ft. (not squared), and are at present facilitated by some old workings on a branch on one side of the shaft; this branch has been also extended on under the level (west), and in an end west of these workings, as well as in an arch in the back, there is a good lode of, from 9 to 12 in., very good lead. In the winzes under the same level we can see that much working proceeding from the sides has also been carried on by former parties, and that the lodes have continued under the level of great productiveness. Further west also, in confirmation of what has been stated in former letters, there are very fine arches of lead, and ground worked very extensively on to within 2 fms. from the end, which, at the time when the driving in this direction ceased, was unproductive. The water is now down below the 31 fm. level 4 fms. 2 ft. 9 inch—the engine working at nine strokes per minute. With respect to the tribute, the pitches continue to look well, varying in produce from 1 to 4 tons per fm.; and as I have before said, on the various shafts being down to the 30 fm. level, so as to facilitate the removal of the ore, we have tribute ground that will set at low prices for some time, independent of what may be between the 31 and the lower level, and what may be also newly discovered.—Lead ore weighed in stock, 3127 arrobas (about 40 tons).

NATIONAL BRAZILIAN MINES.—Received March 25, per *Peterel*.

Coesse, Jan. 2.—We have again the honour of waiting upon you with a report on the proceeding in this mine since the 22d ult., and beg to state, on taking into consideration the hindrances consequent on the intervention of the Christmas holidays, that the work performed during that period has been very satisfactory indeed. You are aware from the preceding report that Hamilton's lower stope is the only point in progres, and that our object in extending the works northerly at this point was for the discovery of other veins, which are in all probability yet undiscovered in that direction, as also to make a communication to Irving's mine by a nearer way than has hitherto been done. On the 22d ult. we succeeded in making this communication, by which means the works above the shallow adit are thoroughly ventilated, and the transmission of the ore from the northern ground greatly facilitated.

Extract from Letter of the Chief Commissioner at the Mine.

On casting up the returns in the gold books from the Serra Velho for the past year, we cannot refrain from expressing our sincere satisfaction at the promises held out of our increased produce having been partially realised. It is true that during the first six months the mine proved cruelly poor, thus tending to dishearten you, which considering your great sacrifices and advances could scarcely be expected to be otherwise. We, however, felt confident that in the course of our explorations under the great Cavaco excavation our labour would not be misapplied or thrown away, and the result has confirmed the correctness of the same, as the produce for 1848 amounted to 220 mks. 4 ozs. 4 oits. 42 grs., whereas that for 1849 amounted to 373 mks. 3 ozs. 3 oits. 58 grs.—presenting a difference of no less than 152 mks. 6 ozs. 7 oits. 16 grs. If we conceived ourselves justified in writing in the manner described in January last, how much more must we do so on the present occasion, when we have two excellent stopes on the line of better veins than any yet intersected, independently of the shallow adit level being communicated to Irving's cross-cut, which gives us great advantages. We hope you will shortly consider our position to be such as to induce you to authorise our augmentation of our negro force by some 50 hands, to enable us to keep our stamping power supplied, as well as to drive to the Terra Cahida veins, where we are most sanguine of success. Of one fact you may rest assured, that nothing can be done in this mine with few hands, and it is only by carrying out the scheme on at least the present, if not a larger scale, that we can reasonably expect to have the grateful office of placing you two gentlemen on an equality with the other shareholders, by freeing you from the heavy liabilities you have been too long subjected to.

Cocaes produce—from 14th to 22d Dec. ..... *Mks.*	25	6	5	22			
,, from 24th Dec. to 3d Jan.	22	3	1	6	48	1	7 10
Cuiaba produce—from 18th to 26th Dec.					1	2	3 10
Total produce ..... *Mks.*					49	4	2 20

ST. JOHN DEL REY MINING COMPANY.

Morro Velho, Dec. 18.—Gold extracted to date, 7269 oitavas, from 406·53 cubic feet of sand (result of 10 days' stamping), equal to 17·87 oits. per cubic foot. Stamps working 17 days, average 93·45 heads. The supply of stone is ample, enabling us to reject more freely on the spalling-floor than in the preceding month, notwithstanding the serious impediments to hauling we have experienced in getting the carriage of the Catherine incline plane to work properly, besides repairs and alterations at both hauling engines.

Incline Planes (Bahu).—After some rather vexatious accidents (which, however, must be generally expected on first setting any new machinery to work), the carriage on the Catherine incline plane is now doing its duty in a very satisfactory manner.

Exploration.—All the captains being agreed as to the propriety of examining the appearances of the lode at the bottom of the valley, behind the Salvador Hill, a small exploring party has been at work there for the last eight days, and have very little doubt that some interesting discoveries may result therefrom. Capt. Tonkin is not of opinion with Capt. Treloar that this is a continuation of the main Cachoeira lode, but rather that it may prove a continuation of the old Vinegrado lode.

Dec. 28.—Gold extracted to date, 13,679 oitavas, from 770·29 cubic feet of sand (result of 19 days' stamping), equal to 17·76 oitavas per cubic foot. Stamps working 27 days, average 93·79 heads. The supply of stone is, of course, affected by the absence of nearly the whole of our Brazilian borers, who are holiday making, still it is ample for the requirements of the stamps.

THE WORTHING MINING COMPANY (South Australia).

This company has received advices from Adelaide up to the 26th November last. The report of the 9th November states:—"The whim, or engine-shaft, has been timbered and sunk 1½ fms; it has not been proceeded with during October take, owing to the high wages demanded, &c. At the middle gully two men have been employed sinking and driving, and we expect they will act on one of the lodes in a few days. Arrangements have been made for the erection of a whim and six cottages, which it was expected would be completed in a month." Some time ago the directors sent out instructions for having a complete survey of the property made, and the following is a copy of the report in reply, dated 26th November, 1849:—"In making our report upon this mine, we beg to state that we have carefully examined the ground belonging to the company, in the line of the principal lodes, which we find existing about two miles, and presenting, upon the whole, a uniform appearance; two of the principal lodes, average from 4 to 5 feet in width, and contain, in some few places, more ore than in others, and we have no hesitation in stating that we consider it a fair mining speculation. As to the future mode of operation, it appears to us the first work should be to sink the engine-shaft, now 5 fms. deep, to the depth of 50 fms., when it will intersect the principal lode. We should recommend that the first shaft on the course of the lode should be continued as the engine-shaft proceeds, for the double purpose of proving the lode and ventilation. Although, from present appearances, the engine-shaft seems the most desirable situation for proving the lodes at a greater depth, the middle gully shaft being further from the surface stream in the gully, and having attained a greater depth before reaching water, and the lodes having as yet been only partially seen, it appears to us very desirable that the present trial should be prosecuted as rapidly as possible, to ascertain whether it would not be a better situation for the steam pumping engine. As the locality of the smiths' shop presents a favourable opportunity for proving the lodes by means of a water-wheel, which we understand is now being forwarded to the colony, we should recommend that the shaft be sunk at this end of the ground as deep as the power of the wheel will admit of, and as near to the principal lode as is practicable, or so as to fall upon the lode ot a not greater depth than 20 fms., which will be 10 fms. below the present workings. We believe that the operations we have now mentioned may be effectually carried on for 200*l.* per month, exclusive of cost of engines and erections, but we cannot help saying that in such an extensive range of mineral ground a further outlay might be judiciously applied."

UNITED MEXICAN MINING ASSOCIATION.

Guanaxuato, Feb. 8.—Mine of Rayas.—I have to refer to the enclosed monthly report by Mr. Parkman, illustrating the character and extent of the operations in the several mines last month. With regard to Rayas, it will be seen that the end of Santo Toribio, to the south-east, has been substituted by a cross-cut to the upper body of the vein, where the appearances now look more favourable. The pit of San Diego has also improved, and the working of San Crescencio, now extended to an end apart from the pit, has so much improved, that a portion of its present produce consists of very rich thread, supported on either side by ore of a good quality, which promises to add sensibly to the general returns of the mine, by reason of being in virgin ground, and to some extent in a north-west or inward direction of our limits. The sales on joint account with buscones have somewhat improved, owing to higher prices paid by purchasers, as well as from a greater amount of work done since the late holidays. The general debt of the mine has been reduced to $457,372 1 2, by the appropriation thereto of the portion assigned for its payment of the surplus of $5495 7 5, arising out of last month's monetary liquidation.

Mine of Aldana.—The pit has been discontinued, and replaced by a cross-cut from its level to the shaft, for ultimate ventilation and transit. The sinking of the latter proceeds uninterruptedly, its present depth being 121½ varas. The second horse-whim is complete and ready for duty, as occasion may offer. Threads of good ore, indicating the proximity of a rich vein, are already met with.

Mine of Promontorio.—Sudden and frequent changes are met with in this mine, affecting both the quantity and quality of its produce; the workings are vigorously followed up.

Mine of Jesus Maria y Jose.—The rock below having hardened, the sinking of the shaft has been stopped, with a view to timber the upper loose ground passed through, which has become unsafe to the workmen. This operation is now nearly completed, and the sinking of the shaft will be resumed next week. Considering the small extent of ground (200 square varas, or one pertenencia) possessed by this mine, I have induced the owners of the adjoining mine of Dolores, holding four pertenencias, to annex it to the other, and make one and the same concern of the two, on the same terms and conditions of avio as agreed upon for Jesus Maria y Jose, which desirable and important object has been attained by the payment of a small sum to the owners. I have to enclose herewith a copy of this agreement, which I confidently submit to the approbation of the court. It may be interesting to the court to know, that the mine of Santa Lucia, situated 1200 varas from, and on the same vein as, Jesus Maria y Jose, yielded last year a net profit of $2,340,409 3 7 to its owners; whilst its gross expences did not reach $1,000,000, and, further, that it continues to yield in the same ratio.

Note.—A remittance of $25,000 has been received by the *Thames* steamer.

Report on the State of the Workings in the Mines of Rayas, Aldana, Promontorio, and Jesus Maria.

Mine of Rayas.—*Frente de Santo Toribio.*—This work has advanced 8·04 varas, and having been turned towards the upper wall of the vein, is again presenting a more encouraging appearance. The pozo near the end, mentioned last month, and called San Diego, has improved.

Frente of San Diego.—Has advanced 6·33 varas in hard vein, with no perceptible improvement.

Crucero of San Ambrosio.—This work has advanced 7·26 varas, without any change worth mentioning.

Workings in Ore.—In the contra cielos de la Purisima and Jesus, there has been no material change. In San Antolino, the small band of ore has improved. In San Crescencio poso the ore is improving, and in the frente, which is being opened from the pozo to the north-west, called San Chistobal, the improvement is more decided, and is at this time promising to produce a marked effect on the produce of the mine. The remaining points worked on ore present no change, and, from their position, little prospect of speculative interest. The nominal number of barmen continues the same; but from the scarcity of workmen, already frequently referred to, the number actually made up varies from day to day. The amount of ore remitted to the hacienda in the 5 weeks is 3700 cgs.

Aldana.—The shaft of this mine has been sunk in five weeks 12·71 varas—making a total depth of 120 varas. The malacate, referred to in last month's report, is now ready to work; and the depth of the shaft is now such as to justify its employment, as a means of accelerating the progress of this all-important work. In the meantime, the pozo and crucero, towards the shaft of Santo Toribio, has advanced 9·97 varas. In the progress of this work, slight threads of good ore have been met with.

Promontorio.—In driving the levels of Santa Catalina, towards the lower wall of the vein, a little good ore, and favourable indications, were met with, and the work was again turned to the south-east, and 6·12 varas have been driven in the vein, which appears to be slightly improving. The pozo of San Feliciano has advanced 3·64 varas; but has not improved as was to have been hoped from its appearance at the end of last month. The vein has become hard and poor; but the work is persisted in, with a view to the ventilation of both mines.

Jesus Maria y Jose.—The shaft of this mine has been sunk 10·87 varas—making a total depth of 36·37 varas. During the past week the sinking has been suspended, for the purpose of timbering the upper portion, which is considered unsafe. This operation will be concluded by the 10th of the present month, when the sinking will be resumed. The workings of the mine are nearly free from water and rubbish.—S. P. Parkman.

ASTURIAN MINING COMPANY.

A special general meeting of this company was held at the offices, Austin-friars, on Tuesday, the 26th instant.

Charles Cuningham, Esq., in the chair.

The Chairman stated that, in consequence of the illness of Mr. Moore, which had incapacitated him for several weeks from attending to business, the deed, and other matters which it was proposed to submit to the meeting, could not be brought forward, and, for that reason, it would be proposed to adjourn to the 16th of April next.

Mr. Lowder moved, and Mr. Knill seconded, a resolution to that effect.

Mr. Webb insisted that there were other liquidators quite competent to conduct the affairs of the company without the aid of Mr. Moore. As the first question was that of re-constitution, he would move, as an amendment, that the business of the day be proceeded with. He had protested against the meeting called by that liquidator, and he would oppose any resolution brought forward in pursuance thereof.

It was objected that Mr. Webb had not paid up his calls, but it was, on the suggestion of Mr. Wilkinson, agreed that the persons attending the meeting should be permitted to make any inquiry respecting the affairs of the company.

Mr. Webb then proceeded to impugn Mr. Moore's conduct, when the Chairman called the speaker to order. He urged that Mr. Moore was not in a state to answer any personal attack; that the board were parties to, and approved of every act that Mr. Moore did, and if there were blame, the whole board were prepared to answer it.

Mr. Gillan said that he was a holder of a number of shares, on which 10*l.* was paid, and that he represented several shareholders, from whom he had received letters to attend the meeting, and inquire into the affairs of the company. That Mr. Moore had wantonly, and without foundation, attacked his character as a trustee, and that of several gentlemen, amongst whom was a professional gentleman above his imputations, and it was right to impugn the conduct of Mr. Moore.

After some further discussion of a mere personal character, the motion of adjournment was agreed to.

Mr. Webb inquired what expenses had been incurred, and warned the directors that any expenses of the deed would be at their own risk?—The Chairman said all expenses were within 300*l.*, of which 175*l.* had been on account of the deed.—Mr. Webb objected to this expenditure as unauthorised.

Mr. Moore stated that the resolution of the meeting of the 27th November, which could not be impeached, fully authorised their proceedings.

A Proprietor inquired what were the present liabilities? and it was stated, in answer, that the liabilities in bills advised were under 2000*l.*, 10,500*l.* to creditors holding the security of the directors, and 4500*l.* to the directors themselves: total, 17,000*l.*—that they had paid off the current liabilities since August last at the rate of nearly 2000*l.* per month, and that they were gradually drawing towards their minimum of outlay.

Mr. Scott then read extracts from a letter, which he had received from J. J. Kelly, Esq., Vice-Consul at Gijon, which assured the proprietors of the value of the property; and that the Spanish shareholders, who had commenced proceedings in opposition to the liquidators, would be inevitably condemned in costs.

The Chairman, with reference to Mr. Moore's administration, stated that he had watched it narrowly from the commencement. It was influenced by the utmost attention, ability, and honourable principle, and that the interests of the company were advancing under it to the most satisfactory conclusion. He (the chairman), upon the suggestion of some of the shareholders, promised that the programme of the proposed re-constitution should be prepared for inspection seven days before the day of adjournment.

Mr. Moore said that he hoped he would be sufficiently recovered by the day fixed for the adjournment to answer any personal attack against himself; and as to the accusations he had advanced, he was prepared to substantiate every charge which he had from the outset made.—The meeting then adjourned.

CALLINGTON MINES COMPANY.

The annual general meeting of adventurers was held at the offices, Salvador-house, Bishopsgate, on Wednesday, the 27th inst.

P. Stainsby, Esq., in the chair.

The notice convening the meeting having been read, the Chairman proceeded to read the following Directors' Report.

The business of the present meeting is to submit for your consideration the agent's report of the present state and condition of this property—to take your vote for passing the accounts for the three months ending with December, and to elect a director and auditors. Respecting the condition of the mine, it will be seen that, under the system of working recommended by Mr. P. N. Johnson, and adopted by a general meeting of shareholders, the progress made, and the result thereof, has been, when generally considered, satisfactory. A great number of operations have been carried into effect, and an extensive quantity of ground developed. The progress of the diagonal shaft has been expedited with all speed consistent with economy; this is now completed to the 100 fm. level, and active preparations are being made to sink below that point. It will be seen that the Kelly Bray lode represents some appearances worth consideration. The agents strongly urge sinking the engine-shaft to the 70 fm. level—in driving which the last 20 fms. have produced 20 tons of copper ore. The operation recommended would ventilate this level, and much facilitate stoping the backs. The energy with which the various operations are being carried into effect will be seen from the circumstance that 546 fms. 5 ft. and 9 in. of ground have been wrought by tutwork during the past year. There are several points presenting interesting indications, fully described by Mr Johnson and the agents; and as the utmost energy, and the closest economy, is being observed in all departments, it is expected that the several operations will be attended with a beneficial result.

Subsequent to which, those of the agent, and Mr. P. N. Johnson, were read:

March 23.—In presenting you with a report for your annual general meeting, in the first place, I would beg to say that the 125 fm. level cross-cut west has, in the last three months, been driven 6 fms. 0 ft. 9 in.; in the last year, 14 fms. 1 ft.; also 7 fms. 3 ft. 6 in. have been sunk in the engine-shaft; the ground in the cross-cut is more favourable for driving than last reported. The 112 fathom level north has been driven in the last three months 23 fms. 0 ft. 9 in.; in the last year, 74 fms. 3 ft. 1 in.; in this level we have been opening moderate tribute ground; the present end is producing saving work for silver-lead ore; we expect to cut the great cross-course in the course of a few days. The 112 fm. level south has been driven, in the last three months, 18 fms. 5 ft.; in the last year, 69 fms.; the lode in the present end is large, about 2 ft. wide, producing work of a coarse quality; we expect, as we drive south from the copper lode, to have an improvement in this level, judging from the level above. The diagonal shaft has in the last three months been sunk 13 fms. 1 ft. 6 in.; this shaft from the commencement has been sunk from the 80 fm. level, and is now complete to the 100 fm. level; the men are now engaged in preparing to sink below the latter level. The 70 fm. level east, on Kelly Bray lode, has, in the last three months, been driven 9 fms. 5 ft.; in the last year, 32 fms. 1 ft. 3 in.; the lode in the present end is about 2 ft. wide, composed of capel, peach, mundic, and copper ore. The 112 fm. level north, at the south mine, has, in the last three months, been driven 9 fms. 2 ft. 4 in.; in the last year, 36 fms. 2 ft. 7 in.—the lode in the present end being rather small, opening ground of a high tribute character; driven and sunk in the different bargains now working, in the last three months, 80 fms. 3 ft. 4 in.; in the last year, 247 fms. 0 ft. 11 in.; driven and sunk in the past year in different parts of the mine, not at present working, 299 fms. 0 ft. 10 in.—making a total number of fathoms throughout the mine on tutwork, during the past year, 546 fms. 5 ft. 9 in. In conclusion, I beg to remark we expect to cut the lode in the 125 fm. level about the middle of next month, when, after driving a few fathoms north and south to drain the lode, we intend to put a rise through to the level above. This being done, we shall be able to bring down the shaft more expeditiously; this shaft being now in the 100 fm. level, we calculate about the middle of May month will enable us to complete it to the 112 fathom level. We would also recommend to your notice the sinking of Kelly Bray engine-shaft to the 70 fm. level; in the first place, to ventilate this level; and, secondly, to stope away the backs, which cannot be done at present from a want of proper ventilation. Although this level has not been very rich, yet the last 20 fms. driven has produced 20 tons of copper ore. We shall sample, on Monday next, the 25th inst., 42 tons of silver-lead ore.

Mr. P. N. Johnson, in his report, stated that he had visited the mines—

The work which I recommended at the last meeting to be done, has been carried out in an efficient manner. The lode just cut at the 125, north mine, is 6 in. wide, carrying a good sparry ore—a sample, as broken, I send per post. An assay has been made of the ore, which gives 78 per cent. of lead, or about 15 cwts. 2 qrs. 14 lbs. in the ton, and 35 ozs. 5 dwts. of silver, which latter is a falling off from the average produce of the upper levels of about 4 ozs.; the lode, however, only just being cut into, and not driven upon, it would be premature to give much opinion of its character; one satisfactory point is the lode having been cut according to calculation of underlay, and, therefore, in some measure, shows strength.

The accounts, which had been made up as follows, and issued to the adventurers antecedent to the meeting, were thereon laid upon the table, and the question being put by the Chairman, the same were passed:—

Statement of Accounts for the Three Months ending with December Cost, 1849:—

EXPENDITURE.

Balance from last account					£2222	2	7
Amount of October cost			£891	11	9		
,, November ditto			836	10	7		
,, December ditto			791	4	2	2519	6 6
Interest and discount						15	0 5
Disbursements—Directors' attendances			£ 62	10	0		
,, London management			50	0	0	112	10 6
Total						£4868	19 6

RECEIPTS.

Silver-lead ores—October returns			£397	12	9		
,, November ditto			738	15	2		
,, December ditto			748	12	9	2385	0 8
Balance						2483	18 10
Total						£4868	19 6
December subsist						£54	10s.

KELLY BRAY DEPARTMENT.

Statement of Accounts for the Three Months ending with December Cost, 1849:—

EXPENDITURE.

Balance from last account					£1245	6	8
Amount of October cost			£302	15	0		
,, November ditto			143	2	5		
,, December ditto			137	16	7	483	14 0
Total						£1729	0 8

RECEIPTS.

Twenty-fourth instalment					£1000	0	0
Copper ore					129	2	7
Balance					599	18	1
Total					£1729	0	8

The meeting was attended by some few shareholders, the Chairman apologising for the absence of Mr. Hodgson, and other proprietors, at the same time expressing his readiness to afford any information in his power in rendering every assistance in the prosecution of the operations of the mines.

In answer to a Shareholder, it appeared that the 70 fathom level yielded 1 ton per fathom; and, in the opinion of the chairman, based upon those entertained by parties practically versed in the mines, he considered that it would be prudent to sink the Kelly Bray shaft, which, however, would be attended with a cost of 600*l.* or 700*l.*, and would extend over time—six months would be required in driving the cross-cut at the 125, the incline shaft being put down on the run of the lode.

Mr. James wished to be informed as to the nature and extent of the working on the Kelly Bray lode, inasmuch that it was his intention to move that the operations be abandoned; he was, however, well pleased with the observations made in the course of the proceedings, and should not press the question.—The Chairman, in reply, stated that the cost of Kelly Bray, for the past month, was 49*l.*; it was true a larger cost had attended its former workings, but that the expenses had been limited, the entire cost attendant on the mines not exceeding 50*l.* per month's returns. There was a want of ventilation in the bottom levels there being 150 fms. driven, and there being no power to extract ore, from want of air, until a shaft or winze was sunk.

Mr. Lewis (a director) considered the mine had much improved in value since the last meeting.

Thanks having been voted to the chairman, Mr. Johnson, the directors, and the other officers of the mine, the meeting separated.

HENNOCK SILVER-LEAD MINING ASSOCIATION.

At the two-monthly meeting of shareholders, held at the offices, Winchester-buildings, City, on Tuesday, the 26th inst.,

James Forsyth, Esq., in the chair,

The balance-sheet showed, receipts for the two months 500*l.*, and expenditure 336*l.*, leaving a balance in favour of the mine of 131*l.*

Capt. James reported, that the samples of gossan which he had selected from the 20 tons raised for experiment did not contain sufficient silver to pay for smelting. That he had been careful not to saturate it with water, as requested, and, in consequence, had sent unnoticed a considerable quantity of spar in the gossan, which reduced the average below the requisite standard. That he was now washing 2 tons and picking out the spar, by which means he would be able to make it marketable: and, if successful, he had an application for 1000 tons per month for so long a time as it could be raised. He further stated, that the wheel was at work, and that nine men had recommenced sinking the shaft for the month, at eight guineas a fathom, and that he proposed sinking 8 fathoms more, and to drive then upon the course of the lode. To effect this it would take about nine weeks. The shaft would then be 28 fathoms from surface, and in the meantime his attention would be turned to raising copper and silver gossan, and carbonate of lead, which is found in bunches in the gossan. He further stated, that the ground in the shaft was very favourable for sinking; and that within the last few days the men who were set to raise copper had been put to drive west, and after driving little more than 2 feet through white killas, they came into a beautiful gossan lode, containing more galena than he had yet discovered. It is a light brown soft gossan, and much richer for silver; and this convinced him that, in the former workings, the western lode had never before been cut. Samples of the gossan had been forwarded to the office.

The Secretary stated that he had recently visited the mine, for the purpose of preparing an accurate plan and sections of the workings, and that he felt it due to Captain James to express his entire satisfaction at the progress made, and the economy and ability displayed by him. The erection of the water-wheel reflected great credit upon him, and it was a general opinion that there was sufficient water-power to drain the mine to the depth of 100 fms. if needed, thus saving the great outlay and continual expense of a steam-engine. He would further observe, that there were facts in connection with the mine which could not be overlooked as a financial item—viz.: the existence within 14 fms. of the surface of immense quantities of gossan, of a beautiful character, and that in this gossan lode are found stones of carbonate of lead, yielding 69 per cent. of pig-lead—that a sample of the gossan had yielded 15 ozs. of silver to the ton of ore, when it was a fact that 5 ozs. to the ton would pay for de-silvering; and that, granting the possibility of this being the richest stone on the mine, it was an object of considerable importance to ascertain whether samples could not be selected and made marketable from that which, without attaching a money value to it at all, is most valuable in connection with other results, which invariably follow such indications as are found to prevail at the Hennock Mine. He had reason to believe that the results of the experiments now being made would, prior to the next general meeting, greatly enhance the value of the mine.

A call of 3s. per share was forthwith declared, to meet the next two months' cost.—The thanks of the shareholders were awarded to the chairman, and the meeting separated, well pleased with the prospects of the adventure.

[Since the above was written, we are informed that samples of the gossan containing the galena and copper referred to, have arrived at the office; they are of a most encouraging description.]

THE KESWICK MINING COMPANY.

At a two-monthly general meeting of shareholders, held at the offices, Cornhill, on the 25th inst.,—Lemuel Brockelbank, Esq., in the chair,—the balance-sheet of the mine for the past two months, showing a balance in hand of 98*l.* 13s. 2d., also a general statement of liabilities and assets, showing a balance of liabilities over assets of 4*l.* 1s. 1d., were submitted and adopted.

A report from the directors was read, stating that the mines have returned a profit of 41*l.* 0s. 10d. in the past two months, and that the directors do not recommend any increased outlay until they are enabled to meet a portion of the necessary expense with the profits of the mine; the return of ore from the present operations being sufficient to defray the current expenses of the mine, and to leave a small profit. It also stated that all operations at the Cobalt Mine have been abandoned.

The thanks of the meeting were given to the chairman and directors.

The following is a copy of the manager's report, read at the meeting:—

At the Brandley Mine, from the shaft, which is sunk to the depth of 25 fms., two levels are driven, the one north and the other south, at a depth of 10 fms. At 20 fms. we have other two levels in the same direction; and at 25 fms. there is a small cross-cut to the vein, which is laying off to the east, owing to the angle at which the vein lies, and on the vein a level is driven for about 15 or 16 fms. north. In the end of this level is the 25 fm. sump. In September last, four men were put to rise over the 10 fm. level north, upon a small piece of ore not more than 2 inches in width, and about a yard in length; this gradually increased in width and length, and has held out to the present time. In some places we have had a rib of nearly solid ore, varying from 4 to 6, and in some instances 8 inches, in width; from this place we have got the principal part of our ore. I am sorry to say, however, it is nipping out at the bottom, but it still continues good overhead. A sump in the salt level we let by tribute, which has raised about 3½ tons of ore; but the men have not taken a second bargain, as the ore is looking much poorer at present; but we have it in contemplation to let it again. Having thus briefly shown you what we are at present working on, I will now submit to your consideration the following suggestions: For the future development of the mine, and in order to make a more permanent working, it will be necessary to go into fresh ground. We must, therefore, look out for a portion of the vein that is likely for bearing ore, and which has not yet been worked; sinking the shaft for 5 fms., therefore, offers the most likely prospect. By this means, we shall get 10 fms. in height, and from 60 to 70 fms. in length to the north; after that we shall get into virgin ground; and to the south we have 10 fms. by about 20 or 25 in length; after that it is untried ground for 30 fms. in height, for the whole length of the vein to the extent of our royalty. In concluding the report on Brandley, I may say, as far as present appearances go, that they are more favourable than could have been expected, considering the short time we have had it in hand, and the miserable manner in which it has been previously worked.

Thornethwaite Mine.—I shall describe as briefly as I can the present prospects and the method of working. The principal seat of our operations is in the 17 fathom level north, which we are driving forward with two men; the vein here is a very fine one, and offers, according to the opinion of all the practical men who have seen it, a fine trial; in this level we have a string of very brilliant ore, supposed to be running into the vein, and from which the principal part of the ore has hitherto been obtained; in a sump on this string, we have four men getting ore—the ore seeming to improve as we get north, the general dip of the ore; on the vein in the level we have another sump, which is also yielding excellent ore, and improves as we advance north. In the 27 fathom level we have a very strong vein, and have cut into ore; but the principal bunch, expected to be going down from above, has not yet, I think, been arrived at, owing to the dip of the ore; this place is very hard and wet; but must be driven, however difficult, in order to prove the mine. Nothing has been done south of any consequence; and it has been thought that if a level was driven south from the bottom of the shaft that it would be a good trial. On the surface we have sufficient power in a 40-ft. wheel to keep the mine dry under ordinary circumstances; and we have also sufficient power to carry two pair of rollers for crushing, which is amply sufficient for all the work we are likely to raise at

present. In concluding this report, I must beg to express my sincere thanks for your cordial co-operation in my previous suggestions; and trust that by the strictest economy, and proper application of capital, ultimately to see the mines in so prosperous a state as adequately to remunerate the shareholders for the sum already expended by them.

LAMHEROOE WHEAL MARIA.

At a general meeting of adventurers, held at the offices, King-street, Cheapside, on the 28th inst.—PETER DAVY, Esq., in the chair—the balance-sheet of the mine was presented (having been duly audited by Messrs. Rushton and Price, the auditors of the mine), and the results are as follows:—

Calls	£17,190	19	2
Liabilities	709	11	8=17,900 10 10
Costs to the end of Feb.	17,428	8	4
Assets	472	2	6=17,900 10 10
Balance against the mine			£237 9 2

Mr. A. MURRAY, jun. (the superintendent), explained that he had carefully examined the lode in the engine-shaft, at Lamherooe, and found that it contained 3 tons of ore per fm., each ton of ore containing 3 cwts. of tin, valued at 2*l.* 10*s.* per cwt., from which must be deducted the following expenses:—Driving and exploring at 5*s.* per fm., and crushing and dressing about 2*l.* per ton, or 6*l.* per fm., 11*l.*—leaving profit per fm. 11*l.* 10*s.*; but stated that at least 12*l.* profit may be calculated upon, and that there is every reason to expect a continuous supply of this ore for a considerable distance, as it is a well-defined lode, in congenial killas. With respect to Davy's shaft, two levels are now driving, both in the 50, from the bottom of the shaft. The northern level is driven 9 fms., at 9*l.* per fm., and Mr. Murray calculates that it will take about 1 fm. more to cut the lode, which has already been seen in the 30 fm. level, and from which so much water proceeded that it has been necessary to dam it up; is a lode of fair promise, and the stratification appears more congenial than it did in the 30 fm. level. The southern level is driven about 3 fms., at 8*l.* per fm., and it will take about 15 fms. more to cut the Benny caunter lode, which is a large one, as shown at Wheal Benny; and Mr. Murray is of opinion that both shafts at Lamherooe are now below uncongenial stratification, which prevails in many parts of this country, and that, therefore, there is fair reason for presuming these lodes may prove productive. Mr. Murray recommends that 12 men should be employed in driving and exploring on the course of the tin lode, in the 60 fm. level, both east and west; and that six men should also be employed in driving upon the same lode in the 50 fm. level; and that the most expeditious means be adopted for ascertaining the value of this lode, before stamps and floors are erected for dressing the ore. Mr. Murray also recommended that the driving at Davy's shaft be continued, provided it can be done with safety to the engine.

A requisition, signed by the holders of 450 shares present, was forwarded to the purser, requesting him to call a special general meeting on the 11th April, for the purpose of making an extra call, which has become absolutely necessary, in consequence of the expenses of working the mine being much increased, by the recent discovery of a valuable tin lode, and on other business.

It was also resolved that all shares in arrear of call, if not paid within 14 days, would become forfeited to the mine.

[A box of ore, broken by Mr. Murray, is open for inspection at the offices.]

TREVISKEY AND BARRIER MINING COMPANY.

At the usual bi-monthly account, held on the 18th inst., the following statement of accounts was produced, and a dividend of 10*l.* per share was declared:—

TREVISKEY.

On account of ore sold Nov. 29 (less dues)	£2891	12	6			
Tin sold Jan. 9 (less dues)	16	14	2—	£2908	6	8
Deduct—Labour, Dec. and Jan.	824	5	3			
Tribute for ore	303	3	9			
Merchants' bills	327	7	11			
Tresavean adventurers	198	1	4—	1652	18	3
Leaving profit of				£1255	8	5
By balance in hand Nov.				36	15	8
Total				£1292	4	1
Deduct dividend of 10*l.* per share				1200	0	0
Leaving balance in hand of				£ 92	4	1

BARRIER.

Due to purser end of Nov.	£57	14	3			
Ditto, sundry small charges	6	9	3—	£64	3	6

The following report, from Capt. Jennings, was read to the meeting:—

March 18.—The lode in the 272 fm level is 20 in. wide, producing stones of ore. The lode in the 260 is 1 ft. wide, hard and unproductive. The lode in the 248 is 3 ft. wide, yielding 7 tons of good ore per fm. The lode in the winze sinking below the 248 is 18 in. wide, but unproductive; this winze is 2 fms. before the end in the 260. The lode in the 260 is 1 ft. wide, producing 2 tons of ore per fm. The lode in the winze sinking below the 260 is 1 ft. wide, producing 1 ton of ore per fm. The lode in the winze sinking below the 224 is 1 ft. wide, producing stones of ore. The lode in the 200 is poor. Two stopes in the bottom of the 236 are each yielding 5 tons of good ore per fm. We have intersected Tresavean lode in the 40 cross-cut, south of Williams's old sump shaft, and find it 18 in. wide, composed of spar, spots of ore, and jack. We are now driving this level south, and expect we have 7 or 8 fms. to drive to intersect the south lode. We last week sampled 505 tons of good ore, and hope to raise 450 tons for March and April.

RUNNAFORD COOMBE MINING COMPANY.

The 11th general meeting of shareholders was held at the Black Eagle, Woolwich, on the 25th instant.

THOMAS CANHAM, Esq., in the chair.

After the usual preliminaries, the report of Capt. T. Hooper was read:—

March 23.—In giving you my report for February and March, I beg to say, that the engine went to work on the 5th of February, and it works exceedingly well; its course is about five strokes per minute, and it consumes about 7 cwts. of coal in 24 hours. On the 7th February, the water was drawn out of Morris's shaft, which was 5 fms. 1 ft. 3 in. below the adit level; after which, it was set to be sunk by 12 men, at 28*l.* 6*s.* 8*d.* per fm.—extent, 3 fms.; they sank 3 fms. 3 in.; but the ground is not square; and it will take two or three days to complete it; the ground is still hard, and my price is 28*l.* 6*s.* 8*d.* per fm. for sinking. We have to sink about 2 fms. 3 in. more to make the 10 fms., and 4 ft. for the fork; it will take five or six weeks to sink the shaft, according to the present appearance of the ground. Since the price of tin has advanced, I have thought upon a piece of ground in the back of the adit level, from the eastern end of ground to the present, which is from 15 to 20 fms. in length; though it is poor in sight, there may be ore enough in it to pay for spending the ground, for it may be spent for 30*s.* per fathom; we have found tin in ground equally as poor in sight as this; therefore, there may be tin in this also; the lode is from 3 to 4 ft. wide. We have now sent away 1 ton of tin to the market at 54*l.* 5*s.*

The purser's accounts, including cost-sheets for Jan. and Feb., and balance-sheet, were presented, showing—Balance in hand, last account, 361*l.* 17*s.*; received on calls, 347*l.* 19*s.*—709*l.* 16*s.*—Mine cost for Jan., 105*l.* 2*s.* 1*d.*; Feb., 134*l.* 19*s.* 7*d.*; dues to Earl of Macclesfield, 12*l.* 13*s.* 7*d.*: leaving in banker's hands, 457*l.* 0*s.* 9*d.*—The accounts having been adopted, a call of 5*s.* per share was made; and a deputation appointed to wait upon Mr. J. Taylor, consisting of Messrs. Canham, Henderson, Pollard, Divall, and Manuel.—A report of the deputation who visited the mine, on putting the steam-engine to work was also read.

[There was an error in the report last week. It was stated that the steam-engine was consuming only 7 cwts. of coals per week; but it should have been 7 cwts. in 24 hours.]

THE DEVON GREAT CONSOLS MINES.

SIR,—On perusing your valuable Journal of the 16th inst., I observe some very instructive remarks from Mr. Hitchens, requesting your talented correspondent, Mr. Murchison, to favour the public with his useful hints on geology, as to the formation of this strongly mineralised strata, showing from what natural process this large vein formed and accumulated such immense quantities of ore. Surely there must be something to be seen in this strata of rock, or cross veins, to account for such an extraordinary deposit, otherwise the geological knowledge of the interior portions of the earth would be of little service to mining operations. Mr. Murchison having an opportunity of minutely inspecting the mine, and examining its natural features, and I have no doubt came to a conclusion as to its formation, his favouring your readers with his views would be highly interesting, as there is something very odd or unnatural about this formation in the features of the plain. Why is the lode split up going west in such an odd way, and expanding to such an extent? Is the component parts of the rock changed, so as to destroy the lode; or is it merely casual, and will unite and form a lode again going west? Is the rock west such as would cause a mass of ore to form if the lode united; or is it the cross lodes that caused the ore to form on the east part? There is something singular in the intersection of these cross lodes, seeing the first shifted the lode 75 fms.; the next (taking the same direction) has not shifted it an inch; the third a cross-course in the country, but not seen near the lode; the fourth crossed the lode without the slightest interruption.

A little explanation from well-educated men, who have studied the subject, as Mr. Murchison appears to have done, no doubt would be very instructive to self-taught practical miners, if produced with some degree of accuracy; as I am quite ready to admit that many of the practical miners lay too much stress on the general features of lodes, without sufficiently noticing the dip the strata, cross-heads, and cross-courses, about lodes. Mr. Hitchen's letters, at the commencement, showing daily the improving progress, only alludes to the kindly appearance of the lode, without one remark as to what produced that appearance. If the productiveness of a lode depended on the nature of the lode itself, we might at once throw professional men's geological science overboard, and take the lode for our guide. I was last week in a railway carriage, going from Redruth to Camborne, when an old mine captain, standing high in public opinion, was remarking on the flattering prospects of mining in these districts; he said one had undergone a check, by the lode becoming reduced to about 6 inches. A friend, holding a large interest, became alarmed, and requested him to inspect it. He did so; and told him not to fear, as he knew, from the appearance of the lode, that it would shortly become equally rich. I asked him what he saw in the lode that enabled him to come to that conclusion. He said the lode was all quartz. I asked if that was his only guide, when he said, "yes; that was quite enough." This appeared strange to me—it being well known that thousands of lodes are to be found in Cornwall composed chiefly of quartz, which never lead to bunches of ore. I am not inclined to fall in with practical men, who take the appearance of the lode solely for their guide; but am more inclined to watch professional men's views, as to the earth's natural laws that cause these metalliferous deposits to form. Hitherto, they have been rather unfortunate in their pursuits, which may have caused them to hold back some very useful information from the public; but they will bear in mind that Wheal Maria, Wheal Friendship, Wheal Rose, Tamar Consols, Great St. George, and a few mines about Camborne, Redruth, and St. Just, are beautiful books of Nature for them to study, and combine with their intellectual genius, to bring out its natural laws, the mine agent's will be found to be easy letters of the alphabet for their guide.

Should Mr. Murchison favour us with his geological views on these subjects, I would venture to ask him to accompany it with a section of the mine, showing the dip of the cross-courses and dip of the ore, and the direction of the largest deep influx of water; also, showing the ground worked away, which would be very interesting to practical men who have not an opportunity to visit the mine. I have not had an opportunity of seeing Mr. Hopkins's work on *Terrestrial Magnetism*, which Mr. Dumaresq referred Mr. Hitchens to; but hope to shortly. However valuable this work may be, I cannot see how it could answer in detail all the queries put by Mr. Hitchens; these questions, it appears to me, can only be answered by Mr. Murchison, from his recent visit to the mine. Mr. Hopkins's able letter, written in 1848, is just the thing practical men want: he is certainly deserving great credit for the boldness of the style in which he brought it before the public, where it was open for professional and practical men to notice the result. Two years having since elapsed, must have made great development by the extension of the mine, and given Mr. Murchison an opportunity of testing Mr. Hopkins's report. If found correct, it is a grand point gained; if not, on his pointing out the errors, the public will have to judge for themselves.—N. ENNOR: *Treborough House, Taunton, March* 27

THEORY OF MINERAL VEINS.

SIR,—The assertion made concerning the possibility of predicting what we are to expect in new mineral ground, by the theory of terrestrial magnetism, will appear to most miners quite new; but to me it is not a startling disclosure. I have examined many mines on this principle, and though in some cases the rule was hardly clear, yet I am not aware of having found a *single exception* to the rule, either abroad or in Cornwall. I hope you will believe me, when I say the theory is fully known and practically applied by two miners in Cornwall to my knowledge, and a few in America. I do not think, however, it would be beneficial to mining that this should be known to the public, for the lords' agents, ever on the alert, would demand too high dues for everything worth having. Therefore, I hope Mr. Hopkins will not give more detailed information for the sake of empty praise, and deprive us of the solid pleasure of obtaining and working good setts. The mining districts would be swarmed with raw hands, to the detriment of old miners.—A MINE AGENT: *Gwinear, March* 27.

ON MINING KNOWLEDGE.

SIR,—I am happy to find that there are some prospects of establishing a mining school, where persons may be properly trained for the office. I say *properly*, because there are *schools* that, instead of doing good, make the minds of the students as contracted as the minds of those miners who have been bred and brought up in one particular locality. Mr. Chowen's, of Dipperton, remarks in your last Journal—viz., that he cannot see the advantage of visiting the Cordilleras—show what selfish narrow-minded beings some of the "bal" men are. Mr. Chowen thinks the science of geology should be cultivated solely for the sake of our home mines, and especially for the mines of Dipperton. Those kind of persons converse with only one sort of men, read but one sort of books, and never see works which the more liberal and intelligent men study; the surrounding horizon of their canton appears all dark and unavailable; the mind as well as the body being confined to this narrow compass, they think that all that is valuable in the world is within it. These persons have, however, a good share of cunning, and are generally dexterous managers of their own products; and they are so occupied with their own speculative traffic, that they are quite blind to the advantages to be derived and offered to *others*, by venturing out into the great ocean of knowledge. To survey the riches that Nature hath so bountifully stored, and continue, to supply for the benefit of our fellow-creatures in other regions, and to dwell on the beauties and harmony of the works of the creation, is beyond the depth of Mr. Chowen, of Dipperton, and, therefore, of no advantage, because it does not enhance the value of his "bal." Mewed up, probably by accident, like many others in a good mine, which the world too often attributes to judgment, he will not look abroad for the sake of others; nor does he wish to be enlightened, as he thinks his own little "land of promise" contains not only what he wants, but likewise all that is valuable in the universe.—E. H.: *March* 28.

CWM ERFIN MINE.

SIR,—My attention having been drawn to a letter, signed "A. Francis," in your Journal of last week, respecting the accounts of this mine, and an explanation having been required of me, I beg to say that the accounts having been passed at a full meeting of the adventurers, and the books of the mine being always open for inspection by the adventurers, I decline entering into a paper controversy with an agent who was unanimously dismissed at a previous meeting, and who holds 10-1000th shares, upon which the call is unpaid, and not, as he represents, one-tenth of the mine. THOMAS P. THOMAS.

George-yard, March 26.

GUADALCANAL SILVER MINING ASSOCIATION.

SIR,—I trust you will excuse my attempting to trespass on your valuable space; the cause, however, I feel sure, will plead its own excuse, particularly as the object is to spare the pockets of, may be, some of your constant readers, but most certainly those of the unwary.

Having read an advertisement in your Journal of the 16th inst., convening a meeting of the shareholders of the Guadalcanal Silver Mining Association, for the 3d of April next, and as business of importance prevents my being present on that day, I trust that the few following facts may meet with a little attention, should they catch the eye of any *bona fide* shareholder. It will be unnecessary for me to enter into any description or history of the formation of this association; suffice it that the capital was to consist of 4000 shares, of 5*l.* each, and was considered, and reported to be, by competent judges, sufficient for the clearing and efficient starting of the mine. To my no small surprise, I some time ago discovered that of the 4000 shares alluded to as forming the capital, 2000 had been very quietly divided as a bonus, amongst the directors or promoters, upon which not a single penny had ever been paid, and would indicate, supposing the shares had never been above par, 10,000*l.* The shares did, however, go to a premium—viz., to from 5 to 10, and, I believe, higher; but allowing it to be only 5, we have the gentlemen, at the expense of the shareholders, putting 29,000*l.* in their pockets, and for what? To desert them in the hour of trial.

In due course of time, as most frequently happens, the reports from the workings proved, beyond a doubt, that the reduced capital of 10,000*l.* was inadequate to clear the mine; and, consequently, to try and save the money already sunk, more capital was indispensable. To have obtained the required sum, one would have supposed, after the rich harvest just gathered in by many, there would have been no difficulty felt in making a call of 1*l.* or 2*l.* per share. The directors, with the "bonus shares" in their pockets, however, thought different, and they decided on creating "preference shares," at the rate of one new share for every two original shares; and, further, that instead of making the amount payable on the new shares equal to that already paid on the old ones, it was fixed at 2*l.* 10*s.* only, or an additional premium of 2*l.* 10*s.*, and will, therefore, represent a further bonus of 1000 shares, or 3000*l.*

The association is styled "anonymous;" I think it has well deserved its appellation, and were it not that my letter has already become too long, I could refer to many more of the proceedings which require close investigation. Railway companies and their directors have been overhauled; the turn for mining companies and their directors may come next, and would, no doubt, prove a rich field for the energetic operations of too confiding shareholders.

London, March 28. A SHAREHOLDER.

THE TREVILLE MINE, LEWANICK.

SIR,—There has of late been many and various interesting reports of a mine called Treville, in the parish of Lewanick—a district hitherto disregarded for metalliferous ores; consequently, I was induced to go there, and I feel a pleasure in stating that the indications at Treville are of an extraordinary rich character, and, in my opinion, well deserving a spirited trial. The annexed hasty memoranda were made on the spot, and I think it right to hand them to the mining public, which I shall effectually do, if you would oblige me by inserting this letter in your Journal. When you come into our county, I hope you may have time for a visit to Treville; it lays in the direct road from L'anson to the Caradon Mines. From the tail of adit into the present end (say 50 fms.) there is an extraordinary rich gossan; also a flookan, and other decided characteristics of a strong lead lode—I say strong, as the lode is more than 8 ft. wide. A side level is now driving round a run in the adit. I was much pleased by seeing in that end a good killas country, and I was also convinced that the lode was well walled in at that point—say, about 20 fms. deep. A cross-cut is driven towards a caunter or parallel lode, and a shaft is down; therefore, every convenience for continuing the end, which is an interesting work, as I was shown some large blocks of lead that were risen from a sink on the back of the lode. There is sufficient water in the sett for working the mine 100 fms. deep. I was informed that there is in the sett rich and abundant deposits of excellent coloured ochre. The agent, Capt. Peter Roskelly, was anxious to give me all the information in his power, and I was pleased to learn that the mine is held by a few well-known respectable gentlemen—consequently you will join me in heartily wishing them success. Y. Z.

Tavistock, March 21.

BWLCH CONSOLS MINE.

SIR,—Under this head, in your last Number, I observe a remark respecting the system of "stoping" carried on by Capt. M. Francis in this mine. All experienced miners are well acquainted with the advantages of stoping underhand, and it is followed when the lode and walls are applicable to such a method. Mines cannot be altered to suit one general system of working; but a system can be varied to suit all mines. The ore may be so dispersed in the rock that, to obtain it with profit, it must be quarried in wide excavations. If what are termed the "walls" are intersected with smooth oblique joints, forming great wedges of rocks, no ordinary timbering could prevent such angular masses from falling into the excavations. Such is the character of the Bwlch Mine, and which, if worked by the ordinary underhand stoping, would not only endanger the future prospects of the mine, but also human life. It was the underhand-stoping system and large timbering that caused the loss of such an amount of ore in the stopes, by the crushing of the timber and falling in of the rocks, in the celebrated Esgair-y-Mwyn, and which prevented a considerable part of the great bunch and branches from being extracted with advantage. I could mention several other instances of the same description of mines leading to the same consequences, which have come under my notice; and also where the driving of *small levels* in *hard ground* have been abandoned, and driving and stoping been adopted with great advantage, both as regards economy and dispatch. The cost per ton for the time being may appear higher than it would be by stoping a few hundreds of tons underhand; but this is not the question—it is the *quantity rendered available* in the mine, and the safety and convenience of the exploring cross-cuts by the system, and the cost per ton of *the total amount*. By the system employed by Capt. M. Francis, he distributes the value of the stores in the mine, over the period it will be worked, and ensures the security of the excavations, and not working it only for the benefit of the temporary or present shareholder, but with due consideration for the *permanent and future proprietors*, according to the rules and spirit of legitimate mining.—EVAN HOPKINS: *March* 27.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

EAST TRESCOLL (TIN).—It will be in the recollection of your readers that, some two years since, a mine was commenced by the name of Wheal Trescoll, or the Model Mine, which has since produced some of the richest tin in the county, and, at the present time, is looking exceedingly well, if the reports in the last week's Journal are correct. On Friday last, another mine, immediately adjoining the Wheal Trescoll, and having the whole of its lodes, was commenced by a London party; it is said, in the neighbourhood, to be superior, as to locality, as well as having the advantage of water-power, which the parent mine has not; the operations are chiefly directed to sinking on the course of a fine tin lode, called the B lode, that has proved so rich only a few fathoms west from the shaft in the other mine; a steam-engine is in preparation, that will be erected as soon as the lode is cut at 9 fms. deep. The management is in London.

NORTH WHEAL VOR.—This mine is situated in the parish of Breage, adjoining the celebrated Wheal Vor Consolidated Mines. Operations have been resumed lately by a company, formed by Mr. G. Phillipps, of Camborne; and I find that the prospects of success are very cheering. I saw, to-day, a stone of tin, taken from Wheal Grose lode—the lode on which the ancients chiefly worked in the sett; and I found that it resembled the tin which made such immense wealth in Wheal Vor Consols. There are two other stanniferous lodes, which have been already slightly opened on in the sett, of a very promising appearance. I am happy to be enabled to state that several mines, besides this, are about to be set to work in the neighbourhood. What a pity that such a mine as Wheal Vor Consols should have been suffered to fall, through mismanagement. It ought to be at work now, and for many years to come.

AN IRISH CALIFORNIA—(*From a Correspondent*).—From several authentic accounts, it seems to be placed beyond doubt that very extensive mines of silver, copper, and lead have been discovered in the immediate vicinity of the small town of Gort, near the seat of Lord Gort, in the county of Galway. The silver mines are on the property of a lady named Blair, and are being extensively worked under the management and immediate supervision of Mr. W. R. Collett, late Member of Parliament for the City of Lincoln. Several shafts have been opened, and the veins of silver ore running through the beds of limestone are stated to be of the richest character, and generally at a very little depth from the surface. The ore already raised has averaged in value 55*l.* per ton; and although the operations have as yet been but partial, ore, to the value of many hundreds of pounds, has been exported. Mr. Collett gives employment to numbers of both sexes—to men at the rate of 1*s.* a day wages, and women and boys 8*d* per day, which is a great source of relief to the district. He has also brought over several experienced miners from Cornwall, who take every pains to instruct the Irish workmen in their labour, and are, therefore, very popular. There are at present about 200 men employed on the works; but, like California at the beginning, there is a want of almost everything necessary, the little town of Gore being quite incapable of giving any supply, and recourse is obliged to be had to Limerick. The copper and lead mines are on the estates of Lord Gort and Mr. Gregory, of Cool, and it is the intention of these proprietors to have a scientific examination of them without delay, in order to test their extent, and adopt the necessary measures for working them, so that it is expected an extensive mining colony will, ere long, spring up in the district.

IMPORTANT APPLICATION OF HYDRAULIC PRESSURE.—On Wednesday last a party of gentlemen, connected with coal mining in Newcastle, assembled at Murton Colliery, belonging to the South Hetton Coal Company, for the purpose of witnessing the performance of a water-pressure engine, recently erected by Messrs. W. G. Armstrong and Co., and used for drawing waggons up an incline plane, situated at a considerable distance from the foot of the shaft. The object of this novel application of water pressure is to supersede the use of horses for underground traction, by a method which obviates the dangers and difficulties which are inseparable from the employment of steam-engines in the interior of coal mines, and the success of the experiment has been complete in every respect.—[We shall give some particulars in our next Journal.]

LATEST CURRENT PRICES OF METALS.

LONDON, MARCH 28, 1850.

ENGLISH IRON. *a*		*per ton.*				
Bar, bolt, & square, London	£5	15	—6	0		
Nail rods	6	15	0			
Hoops	7	15	0—8			
Sheets (singles)	8	15	0			
Bars, at Cardiff & Newport	5	0	0			
Refined metal, Wales*	3	5	—3	10		
Do. anthracite*	3	15	0			
Pigs in Wales	3	0	—3	5		
Do. do. forge	2	15	0			
Do., No. 1, Clyde ... *net cash*	2	4	—2	5		
Blewitt's Patent Refined Iron for bars, rails &c., free on board at Newport*	3	15	0			
Do., do., for tin-plates, boiler plates, &c., ditto	4	10	0			
Stirling's Patent } in Glasgow	2	17	—3	0		
Toughened Pigs } in Wales	3	10	—3	15		
Staffordshire bars, at the works	6	0	0			
Pigs, in Staffordshire	3	5	0			
Rails	5	0	0—5	5		
Chairs	4	0	0			
FORE.GN IRON. *b*						
Swedish	£11	10	—12	0		
CCND			—			
PSI			—			
Gourieff			—			
Archangel			—			
FOREIGN STEEL. *c*						
Swedish keg	£14	15	0			
Ditto faggot	15	0	0			
ENGLISH COPPER. *d*						
Sheets, sheathing, & bolts, *p. lb.*	0	0	10			
Tough cake *per ton*	88	10	0			
Tile	£87	10	0			
Old copper *e* *per lb.*	8½*d*					
Yellow Metal Sheathing	8½*d*					
FOREIGN COPPER. *f*						
Russian, PSI	—					
ENGLISH LEAD. *g*						
Pig *per ton*	£18	5	—18	10		
Sheet	19	5	—19	15		
Pipe	19	10	—20			
Red lead	19	10	0			
White ditto	25	0	0			
Patent shot	21	0	0			
FOREIGN LEAD. *h*						
Spanish, in bond	17	10	0			
ENGLISH TIN. *i*						
Block *per cwt.*	4	0	0			
Bar	4	1	0			
Refined	4	11	0			
FOREIGN TIN. *k*						
Banca, H. C.	3	17	0			
Ditto, for Export only	3	15	0			
Straits	3	15	0			
TIN-PLATES. *l*						
IC Coke *per box*	1	8	0			
IC Charcoal	1	12	—1	13		
IX ditto	1	19	0			
SPELTER. *m*						
Plates, warehoused *per ton*	15	15	—16	0		
Ditto, to arrive	—					
ZINC. *n*						
English sheet *per ton*	22	0	0			
QUICKSILVER *o* *per lb.*	4*s.*					

Terms.—*a*, 6 months, or 2½ per cent. dis.; *b*, ditto; *c*, ditto; *d*, 6 months, or 3 per ct. dis; *e*, 6 months, or 2½ per cent. dis.; *f*, ditto; *g*, ditto; *h*, ditto; *i*, ditto; *k*, net cash; *l*, 6 months, or 3 p. ct. dis.; *m*, net cash; *n*, 3 months, or 1½ p. c. dis.; *o*, ditto, 1½ dis.

* Cold-blast, free on board in Wales.

GLASGOW, MARCH 28.—Our pig-iron market continues in the same quiet state as for three weeks back, and there does not seem any prospect of immediate improvement. The price of mixed Nos. may be quoted at 44*s.* for cash.

LIVERPOOL, MARCH 28.—We have to report an inactive market; still prices of first marks remain without alteration, while inferior qualities must be reported a shade lower. In this market there has latterly been several parcels of common bars forced off at almost nominal prices, which had rather an injurious effect. The demand for tin plates continues very good, and prices are well supported. In lead and copper there is no change since our last report.

BIRMINGHAM, MARCH 30.—The preliminary quarterly meeting of ironmasters for the South Staffordshire district was held at the Union Hotel on Thursday, and was very numerously attended. From the flatness of the trade for some time past, a general impression prevailed that manufacturers would be compelled to give way, and orders have, in consequence, been withheld, in anticipation of reduced rates; but we are happy to be able to announce that the position of the trade, although far from active, does not justify a measure which would unsettle all existing arrangements between masters and men, and otherwise inflict great mischief on the manufacturing interests of the district. The meeting was all but unanimous in the resolution to maintain the prices of last quarter, and in the event of a slackness of demand, to limit the production rather than reduce rates. The determination come to will, no doubt, be questioned by parties interested in lowering the value of our staple manufacture; but we are assured that the resolution of the masters, on Thursday, is fully warranted by the position and prospects of the trade. The stocks on hand are very limited; and now that the question of prices, for the current quarter at least, has been set at rest, orders may be expected to flow into the market, and a feeling of greater confidence be created by a knowledge of the fact that the lowest remunerating point has been reached.—*Birmingham Journal*, this morning.

THAMES TUNNEL COMPANY

The number of passengers who passed through the Tunnel in the week ending March 23, was—No. of passengers, 19,198.—Amount of money, £79 19*s.* 10*d.*

Current Prices of Stocks, Shares, & Metals.

MINES.—An average amount of business has been transacted this week, and shares generally continue firm in most of our leading mines. The reports received from the mining districts during the week are of a satisfactory character.

Tincroft continues in the same improving position as last reported, and a great many shares have changed hands at an advance.

Alfred Consols have very much improved since our last, and transactions have taken place at a considerable advance, and shares still in demand. The 70 fm. level, east of Field's shaft, is worth 20*l.* per fm.—still improving. The winze under the 60 east is worth from 40*l.* to 50*l.* per fathom for copper alone; the 60 end is nearly solid ore, worth 70*l.* per fm.

A large number of Penzance Consols shares have changed hands during the week, and the mine is represented to be progressively improving.

Levant, Boswidden, and Botallack shares have advanced. At Bosorn Mine, a fine lode of tin has been discovered going down in whole ground under the adit level. A new water-wheel is in course of erection, which, when completed, tin will be returned at once.

At Spearne Consols, a rich lode of tin has been cut in the 60 fathom level on Button White's lode; this being in virgin ground, will give 66 fms of unexplored ground from the 60 to the 128 fm. level.

Several transactions have taken place in the shares of the Wicklow Copper and Sulphur Mining Company. This company was formed at the close of the last year for working copper ore, lead, and sulphur in the rich mineral basin, situate near the Vale of Avoca, which embraces the well-known mines of Ballymurtagh, Ballygahan, Cronebane, and Connoree, all of which have uniformly returned large profits. Sales of lead have been effected at good prices, and preparations are making for the shipment of sulphur ore, for which there is a demand at remunerating prices, for the alkali-works in and near Liverpool.

At Wheal Providence (South Sydenham), a fine course of lead was recently discovered, and a further discovery has been made during the week, more to the west of the former course.

At the Treviskey and Barrier bi-monthly account, a dividend of 10*l.* per share was declared on the former. The profits on the two months' working amount to 1255*l.* 1s. 5d., which, added to credit from last account, leaves in hand, after payment of the dividend, 92*l.* 4s. 1d., with ore bills not yet at maturity. The lode in the 236 end is producing 2 tons of ore per fm., and two stopes in the bottom of the same level, are turning out 5 tons each per fm. In the 248 fm. level the lode is yielding 7 tons of good ore per fm: 505 tons have been sampled for January and February, and 450 tons are expected to be raised for March and April.

The directors of Carn Brea Mine declared, on Tuesday last, a dividend of 3000*l.* for the two months, being 3*l.* per share. The mine is represented to be looking remarkably well.

At the bi-monthly meeting of the Keswick Mining Company, the statement of accounts showed a balance in favour of mines of 98*l.* 13s. 2d., and a profit of 41*l.* on the Jan. and Feb. workings. The reports from the lead mines are highly favourable, and the company, having abandoned that *ignis fatuus*, the cobalt, there is every reason to believe the lead mines will ultimately reward the shareholders with that long-looked-for boon—a dividend.

At the South Wheal Tolgus meeting, held at the mine on Wednesday, the accounts were produced, showing—Balance last account, 410*l.* 3s. 11d.; ores sold, less dues, 1986*l.* 18s. 11d.=2397*l.* 2s. 10d.—Costs and merchants' bills, 1251*l.* 10s. 4d. A dividend of 2*l.* 20s. per share (640*l.*) was declared: leaving balance in favour of adventurers, 505. 12s. 6d.

At the West Wheal Seton meeting, held at the mine on Tuesday, the accounts for January and February were presented, showing—Balance last account, 118*l.* 13s. 4d.; costs and merchants' bills, 781*l.* 15s. 5d.=900*l.* 8s. 9d.—Ores sold, less dues, 558*l.* 13s. 8d.; call in January, 200*l.*: leaving balance against adventurers, 141*l.* 15s. 1d.

Holmbush general meeting was held on Wednesday, and the Wellington Mines bi-monthly meeting on Thursday—the particulars of which have not yet reached us.

At the Lamheroos Wheal Maria meeting, the statement of accounts showed a balance of 237*l.* 9s. 2d. against mine. From the great improvement which has recently taken place (and, acting upon the recommendation of Mr. A. Murray, jun., the adoption of more vigorous operations), the meeting resolved upon a special meeting being convened for the 11th April, to arrange for a sufficient call to meet their improved prospects.

The annual meeting of the Callington Mines Company was held on Wednesday, particulars of which will be found in another column.

At the bi-monthly meeting of the Hennock Silver-Lead Mining Company, the balance-sheet showed a credit of 131*l.* in favour of mine; but for the purpose of meeting costs of future operations, a call of 3s. per share was deemed necessary. The prospects of the mine are considered highly favourable.

An adjourned meeting of the East Wheal Josiah adventurers was held on Tuesday, the 19th inst., when the accounts were examined and passed, showing balance of 2*l.* 3s. 9d. against mine, and a call of 2s. 6d. per share made. It was also resolved that, in consequence of an important discovery having been made in some adjoining ground, and the lode proved by costeaning to be continuous throughout the entire length of this sett, the same be more fully developed by driving on the course of the same.

The Welsh mines, especially in Cardigan, are represented to be looking remarkably well. At Esgair Llee, the caunter lode, in the 52 fm. level, has improved, yielding from 20 to 25 cwts. of ore per fm. At Llwynmaiees, the 8 fm. level west is in a very good course of ore, and the stopes over this level have the finest lode yet seen—30 tons have been sampled.

A large number of shares in Black Craig and Craigton have changed hands.

Shares in the following mines have changed hands during the week:—Devon Great Consols, Condurrow, Treviskey and Barrier, Tincroft, Alfred Consols, East Buller, Trelawny, East Tamar, Trehane, Daren, Penzance Consols, Bedford United, Herodsfoot, Gustavus, Kirkcudbright, Stray Park, Mary Ann, West Caradon, Tremayne, Heignston Down, West Wheal Treasury, Pendarves, Court Grange, Drake Walls, Black Craig and Craigton, Wheal Albert, &c.

In Foreign Mines, there has been a considerable amount of business transacted in Imperial Brazilian, United Mexican, and National Brazilian shares, arising from the very favourable accounts received from the mines during the week. St. John del Rey, Copiapo, Cobre, Santiago, Linares, and Australian shares have also changed hands.

The Alten Mines report has been received, but it advises of no actual improvement worthy of notice, although the prospects are considered to be of a more cheering character.

Despatches have been received by the Imperial Brazilian Mining Association, to the 3d January, and advises of some very considerable improvements in the Big Pump veins, at Bananal, which have proved highly productive, with very encouraging prospects as regards the future. The returns for the last month are upwards of 60 lbs. from both mines.

The gold report, from the 13th to the 31st December, is given at 52 lbs. 2 ozs 7 dwts.—Gongo returning 4 lbs. 11 ozs. 13 dwts., and Bananal, 48 lbs. 2 ozs. 14 lbs., notwithstanding some impediments had retarded the operations. The total raised since the 1st of July is 160 lbs. 1 oz. 15 dwts. A remittance of 48 lbs. 2 ozs. 19 dwts. 10 grs., estimated at 2700*l.*, has been received by the *Petrel*, and a further remittance of 66 lbs. 2 ozs. 19 dwts. 10 grs. left the mines on the 7th December for Rio, which may be expected by the next packet.

The National Brazilian letters are to the 3d of January, and represent the prospects as progressively improving. The comparative returns of 1848 and 1849 show an excess of mks. 152 6 7 16 over the former year. The produce from the 14th December to the 3d of Jan., is for Cocaes mks. 48 1 7 10, and Cuiaba, from the 18th to 26th December, mks. 1 2 3 10; total, mks. 49 4 2 20. A remittance of 12,000*l.* has been received by H.M.'s packet, *Petrel*.

The St. John del Rey letters received are to the 28th December, and furnish the returns of gold to date at 13,679 oitavas; the results of 19 days' stamping. The supply of stone is abundant, notwithstanding the casualties which have occurred, and the Christmas holidays, which have been kept by the natives, and caused a serious loss of labour to all the Brazilian Mines.

By reference to another of our columns, it will be observed that the advices received by the United Mexican Mining Company maintain the same favourable aspect of continuous improvement as indicated in the preceding despatches. In the old mine of Rayas, a newly-prosecuted working, called San Cristobal, was promising to become one of the most productive points in the mine. An addition of 800 square yards of pertinencia had been made to the Mine of Jesus Maria y Jose on the famous San Lucia vein, and the indications in sinking the shaft of the Mine of Aldana are such as to encourage the practical miner to look for a rich vein of ore.

Advices have been received by the Worthing Mining Company (South Australia) to the 26th of Nov., and states the operations at surface to be going on very satisfactorily. A survey of the property having been requested by the home direction, a report has been furnished, particulars of which will be found in the column under Foreign Mines.

The Linares report, to the 18th March, affords every encouragement to the most sanguine expectations of the proprietary. The discoveries, as they progress, are very satisfactory, with strong presumption of having a productive mine when once cleared. The pitches continue to look well, varying from 1 to 4 tons per fm.; 40 tons have been weighed into the stores during the week, and preparations are being made for transmitting the first shipment to England.

THE BRAZILS.—The *Priscilla* arrived at Liverpool yesterday morning from Pernambuco, from whence she sailed on the 15th February, consequently bringing eight days' latter news than received by the *Columbus*.

Her Majesty's brig, *Cygnet*, arrived at Plymouth, on Thursday, from the coast of Africa, bringing 390 ozs. of gold for Messrs. Foster & Smith, merchants.

HULL, THURSDAY.—The share market has relapsed into a state of perfect gloom, which the issue of the Caledonian report has had a decided tendency to increase.

PRICES OF MINING SHARES.

BRITISH MINES.

Shares.	Company.	Paid.	Price.
1000	Abergwessin	9	6
1024	Alfred Consols	8	32½ 35
1024	Arundell	2	—
1024	Ashburton United Mines	9½	12
1624	Balleswidden	9	14
128	Bainoon Consols	42½	50
905	Barristown	5	4 5
3650	Bawden	¼	¼ ⅜
6000	Bealbury	1	1
4000	Bedford	2½	4½ 5
1280	Birch Tor & Vitifer	10½	6¾ 7
5000	Black Craig & Craigton	—	5
8000	Binenavon	50	10
5000	Blisland Consols	1	—
1024	Bodmin Consols	3	3½
5000	Bodmin Moor Consols	1	3
60	Bosorn	5½	7½
100	Botallack	182	50 55 60
120	Brewer	5	2½
10000	British Iron, New, regis.	12	8
—	Ditto ditto, scrip	10	10
2400	Bryn-Arlan	2	3
107	Budnick Consols	52½	12
1000	Callington	22	4½ 5
1000	Camborne Consols	7	3
20000	Cameron's Steam Coal	7	1
256	Caradon Mines	22½	10
256	Caradon United	24	5 8
572	Caradon Wh. Hooper	5½	4¾
1000	Carn Brea	15	115 120
1000	Carthew Consols	1½	7
113	Charlestown	220	—
500	Comblawn	5½	4½
128	Comfort	45	55 58
256	Condurrow	30	128 130
2560	Cook's Kitchen	14	7¾ 8½
1000	Coombe Valley Quarry	5	5
1000	Copper Bottom	7½	—
900	Court Grange	9	10
212	Craddock Moor	25½	5
128	Creeg Braws	120	30
500	Cubert Mine	12½	—
1000	Cwm Erfin	4	4 4½
1000	Daren	2	7 10
7100	Derwent	8½	3
502	Devon & Courtenay Con.	11½	2½ 2¾
1024	Devon Great Consols	1	227½
1000	Dhurodo	2	5
182	Dolcoath	30	20
2560	Drake Walls	9½	3½
10000	Durham County Coal	45	9
3000	Dyfngwm	10	15
1020	East Alvenney	2½	5
2500	East Birch Tor	3	3
1024	East Buller	2	5½ 6
2048	East Crowndale	7½	1¼
4000	East Gunnis Lake Junc.	¼	⅜ ½
128	East Pool	15	60 5 73½
9000	East Tamar Consols	19	1½
258	East Tolgus	1½	4½
94	East Wheal Crofty	125	65
128	East Wheal Rose	50	450 500
—	East of Scotland Iron Co.	5	1½
1280	Esgair Llee	2	4 5
248	Exmoor Wh. Eliza	11	10 12
494	Fowey Consols	40	45
1024	Freidd Llwydd Mines	1½	3½
256	Garras	41	24
4000	Gen. Mining Co. for Irel.	1½	1½
2500	Georgia Consols (Tin)	½	1½
256	Gonamena	44½	16
128	Goonvrea	4	2
256	Grambler & St. Aubyn	80	6
96	Great Consols	1000	250
512	Gt. Wh. Rough Tor Con.	24½	20
6000	Growa Slate Company	5	5
1626	Gustavus Mines	3	2½ 3
256	Hawkmoor	12½	70
6000	Heigniston Down Con.	2½	2½ 3
1500	Hennock Silver-Lead	18s	5 5½
4500	Hennock Iron & Tin	21s	21s
512	Herodsfoot	16	14 14½ 15½
10000	Hibernian	12½	1½
1000	Holmbush	22	13
2200	Keswick	10	10
1024	Kingsett and Bedford	1½	4 4½
787	Kirkcudbrightshire	8½	5 5½
2048	Lamheroos Wh. Maria	9	4½
252	Lanarth Consols	—	7 8
256	Lelant Consols	47	25 26
160	Levant	—	160
1000	Lewis	17	9½ 10
1000	Llwynmaiees	9	10
3600	Llynvi Iron	50	50
253	Lostwithiel Consols	23	10
6000	Marke Valley	10	⅝ 1
5000	Mendip Hills	3½	3 3½
128	Metha	34	—
20000	Mining Co. of Ireland	7	5
1024	North Buller	—	1½ 2½
100	North Pool	45	500
140	North Roskear	5½	150
262	North Wh. Leisure	1½	2
512	North Wheal Vor	—	2½
10000	Northern Coal Co.	23	2
128	Par Consols	55½	650
1060	Pendarves & St. Aubyn	4	4
1248	Pengelly Tin	—	1
6201	Pennant & Craigwen	2½	3½
1000	Penybank and Erglodd	4	5
1024	Penzance Consols	22s 3d	4½ 4¾
5000	Peter Tavy & Mary Tavy	½	⅞
512	Plymouth Wh. Yeoland	6½	6
2500	Rhoswiddol & Bacheiddon	10	10
10000	Rhymney Iron	50	13
10000	Ditto New	7	6½
2048	Runnaford Coombe Tin	1½	2½
9000	South Tamar	19	3 3½
128	South Caradon	5	200

BRITISH MINES—*continued.*

Shares.	Company.	Paid.	Price.
1100	South Dolcoath	5	¾ 1
256	Sth. Friendsh. Wh. Ann	30	28 30
256	South Molton	7	12 13
1024	South Plain Wood	1	5
300	South Speed	5	5
256	South Tolgus	16	135 140
256	South Trelawny	28½	8
2000	South Wales Mining Co.	1	1½ 2
128	South Wheal Basset	20½	510
124	South Wh. Frances	160	400 420
256	South Wh. Josiah	2	3½ 4
10000	Southern & Western, Irish	2½	4
280	Spearne Moor	30	40
128	Spearne Consols	10	60
256	St. Aubyn and Grylls	2½	5
94	St. Ives Consols	—	80
128	St. Michael Penkivel	5	10½
999	St. Minver Consols	1	6
1000	Stray Park	43	26
9600	Tamar Consols	3	6½ 7
10240	Tavistock Consols	½	⅜ ½
1024	Tavy Consols	6½	1½
6000	Tincroft	7	14 14½
58	Tokenbury	170	10
240	Tolcarne	8	20 22
5000	Tregeare	1	1
256	Tregorden	3½	7 8
256	Trehane	1½	32
5000	Treleigh Consols	6	2½ 3
2000	Trenance	3	—
1500	Trenault Lime Quarries	2	3
96	Tresavean	10	95
120	Trethellan	5	21½
120	Treviskey and Barrier	130	240 250
512	Trethevy Copper	2	2 2½
512	Treville (Lewanick)	½	3
1000	Tyllwyd	2	2½
200	United Mines	50	150 160
256	Wellington Mines	25	25 30
128	West Buller	10	420
256	West Caradon	20	93
512	West Fowey Consols	40	12
1024	West Par Consols	5	—
2500	West Polgooth	5	5½
	Ditto Notes	1	1½
512	West Providence	9	16½ 20
200	West Seton	45	150
120	West Trethellan	5	20
512	West Wheal Frances	1½	8 9
256	West Wh. Friendship	9	8
3845	West Wheal Jewel	12	2½ 3
940	West Tolgus & Treloweth	12	3
1024	West Wheal Treasury	7	25
1024	Whiddon Mines	4½	2
5200	Wicklow Copper	5	13 13½
5000	Wicklow Copper and Sulphur Mines	3	3½ 3¾
107	Wheal Adams	130	150
1000	Wheal Agar	—	6
256	Wheal Albert	10	28 29
240	Wheal Anderton	28	9 10
128	Wheal Ann	—	50½
512	Wheal Anna Maria	7	4
120	Wheal Bal	5½	10
256	Wheal Benny	14½	2
1024	Wheal Bray	11½	10
232½	Wheal Caistock	9	20
256	Wheal Carpenter	—	7½
208	Wheal Courtenay	20	23
182	Wheal Elizabeth	9	22 22½
256	Wheal Fortescue	15	12 13
100	Wheal Friendly	70	66½
388	Wheal Franco	27	11 12
1000	Wheal Grose	3s	5½
100	Wheal Henry	—	35 45
1024	Wheal Lawrence	3½	3½
112	Wheal Margaret	79	190
512	Wheal Mary Ann	5	38 40
5000	Wheal Miy	½	⅜ ½
360	Wheal Oak	25½	5
3000	Wheal Penhale	1½	6
210	Wheal Prospect	4	7
120	Wheal Reath	41	75 80
128	Wheal Rose	60	3
198	Wheal Seton	107	240 50
1056	Wheal Sarah	4½	7
512	Wheal Sophia	5½	6
128	Wheal Squire (St. Erth)	—	5
128	Wheal St. Ann	30	38
1100	Wheal Trescoll	6½	7
260	Wheal Trelawny	7½	87½
256	Wh. Tremaine (St. Ervan)	9½	2½
1024	Wheal Tremayne	9½	7½ 8
267	Wheal Tryphena	40	62½
1000	Wheal Vincent	5	8
128	Wheal Vlow (Perranz.)	1½	1½
184	Wheal Vyvyan	—	60

FOREIGN MINES.

5000	Alten Mining Company	14½	2½ 2¾
15000	Asturian Mining Co.	15	2½
20000	Australian	4	5½ 6
6000	Barossa Range	1½	1⅝ ¾
10000	Brazilian Imperial	23	6 6½
12000	Cobre Copper Co.	40	32 33
10000	Copiapo Mining Co.	14	4 4½
20000	General Mining Ass'n.	20	13 13½
4000	Guadalcanal	5	1
2000	Ditto Preferential	2½	2
5000	Kinzigthal Mining Ass.	2	1½
5051	Mexican Company	59½	—
20000	Mexican & South. Amer.	8	1 1½
5000	National Brazilian	30	5 5½ 5¾
104000	N. Brit. Australasian	1	¾
7000	Royal Santiago	10	8 9
14000	St. John del Rey	15	13 13¾ 14
43174	United Mexican	Av.	28½ 7½ 8
10,000	Worthing (S. A.)	2	2½

*** *We should feel greatly obliged by agents, or others interested, furnishing us with such corrections for our Share List as we may not have received through our usual channels of information—our object being, to present as accurate a list of prices as can be obtained—to procure which, we solicit the aid of correspondents in general.*

RAILWAY TRAFFIC RETURNS.

Names of Railways.	Length. 1850	Length. 1849	Present actual cost.	Price p. share	Last Div.	Traffic Returns. 1850	Traffic Returns. 1849
Aberdeen	64½	16	1,000,547	10⅝	—	£ 937	£455
Belfast and Ballymena	37½	37½	514,968	17½	5	542	471
Birkenhead, Lancashire, & Chesh.	15	19	1,256,306	18½	5	816	797
Bolton, Blackburn, & West Yorksh.	14	—	914,521	5½	—	410	372
Bristol and Exeter	84½	75½	2,833,184	67½	3½	3855	—
Caledonian	160	141	5,149,320	8⅝	3	6292	4909
Chester and Holyhead	94½	84	3,358,217	8⅝	4	1453	1210
Dublin and Drogheda	35½	35½	778,565	25 6	—	921	744
Dublin and Kingstown	7½	7½	395,915	—	6	567	676
Dundee, Perth, & Aberdeen Junc.	47½	47½	660,180	8½	3	1039	1016
East Anglian (Lynn to Ely)	61½	67	1,247,446	1½	—	608	622
East Lancashire	75½	24	2,938,887	8½	5	2810	1988
Eastern Counties and Norfolk	322	295	13,139,166	7½	—	14380	12668
Eastern Union	95	50½	1,782,703	4½	—	1869	1150
Edinburgh and Glasgow	57½	52½	2,923,199	24½ 6	4	3037	3051
Edinburgh and Northern	70	34	2,241,276	7	2	2117	1814
Glasgow, Paisley, and Ayr	102½	74	2,574,330	49½	3	2762	2868
Glasgow, Paisley, & Greenock	23	23	852,846	11	2½	1032	951
Gt. Northern & East Lincolnshire	143	—	5,138,756	7½	5	3091	1611
Gt. Southern & Western, Ireland	188½	110½	3,552,589	26½ 7	6†	4150	3410
Great Western	230½	206½	11,867,042	55½	4	18379	18077
Lancaster and Carlisle	90	70	1,476,102	51 52	4	3172	2035
Lancashire and Yorkshire	219	127½	10,063,862	36½ 5½	3	11170	11 94
Liverpool, Crosby, & Southport	13	—	84,455	5½	—	97	84
London and North Western	478½	428	26,251,635	105	5	40659	37140
London and Blackwall	5½	4	1,299,675	3⅝	1-12	605	417
London, Brighton, & South Coast	171½	162½	6,502,600	80 79½	4½	7694	7436
London and South-Western	242	194	8,651,353	63 1½	3½	8468	8455
Londonderry and Enniskillen	14½	14½	187,738	16	—	149	143
Manchester, Sheffield, & Lincolnsh.	160½	94½	6,598,260	13	5	—	3373
Midland Company	492½	423½	15,133,779	28½	5½†	20106	20384
Midland Great Western (Irish)	50	36½	725,332	25½ 24½	4†	1072	1072
Monklands	36	—	486,245	—	6	—	—
North British	135	83	3,649,055	8½	3	3076	2614
Scottish Central	45½	—	1,364,228	12½	5	1251	965
Shrewsbury and Chester	48	23	969,618	8½	4	1343	1407
Shropshire Union	30	—	—	3	—	446	—
South Devon	57½	29	1,927,686	6	5	1708	1747
South-Eastern	284	165½	8,666,007	14½	3½	8593	6570
Taff Vale	38	40	879,110	—	6½	2055	2179
Ulster	36	36	793,829	45½	—	—	683
Waterford and Limerick	25	—	512,894	—	—	—	—
West Cornwall	13	—	207,772	—	—	249	246
Whitehaven Junction	12	12	169,852	9½	1	201	—
York, Newcastle, & Berwick	290½	242½	6,827,849	13½	2½	—	11336
York and North Midland	260	234	4,983,618	16½	1	6793	6557

MIDLAND RAILWAY.—It appears that a committee of shareholders in this company, residing at Sheffield, are endeavouring to compel the directors to immediately close the capital account. They state that it would require an average income of about 28,000*l.* per week to pay 5 per cent. on the capital, and that the average income of the past half-year was less than 24,000*l.* per week, and that at present it is much below that sum. They estimate the working expenses and renewal fund at the rate of 10,936*l.* per week, the interest on loans and the 50*l.* shares at 9730*l.* per week; together, 20,666*l.* per week. They look mainly to the reduction of expenses and the increase of traffic to improve the dividend. They doubt whether the traffic arrangement with the London and North-Western Company is mutually advantageous. They are determined to give the board no rest until the capital account is closed; and they will use their utmost to effect an improved mode of letting the contracts, by which they expect to reduce the expenses considerably. They wish to have fewer, but better qualified, directors than they have at present, whose remuneration shall rise with the amount of dividends paid on the consolidated stock.

LEAD ORES

TICKETINGS FOR ABOUT 90 TONS FOXDALE LEAD ORE.

Douglas, Isle of Man, March 23.

Bidders.	*Price per Ton.*
Walker, Parker, and Co.—Dee Bank (purchasers)	£13 13 0
J. H. Meredith, trustee to the late J. T. Treffry—Fowey Consols	10 14 0
Combmartin Smelting Company—Barnstaple	12 2 6
Tamar Smelting Company—Bocraiston	13 1 6
Thomas Somers—Bristol	12 13 6
Sims, Willyams, Nevill, and Co.—Llanelly	13 1 6
Mather and Co.—Bagillt	13 6 6
Newton, Keates, and Co.—Bagillt	13 11 0
Pontifex and Wood—Newcastle	12 3 0

TICKETINGS FOR ABOUT 100 TONS (20 CWTS.) NEWTONARDS LEAD ORE.

Douglas, Isle of Man, March 26.

Bidders.	*Price per Ton.*
Sims, Willyams, Nevill, and Co. (purchasers)	£11 19 6
Thomas Somers	11 18 6
Newton, Keates, and Co.	11 18 0
Walker, Parker, and Co.	11 17 0
Panther Smelting Company	11 14 0
Combmartin and North Devon Smelting Company	11 10 6
Tamar Smelting Company	11 8 6

Ticketings at the King's Head Hotel, Holywell, March 28.

Mine.	*Tons.*	*Price per Ton.*	*Purchasers.*
Pen-yr-henblas	36	£12 1 6	Mather & Co.
ditto	36	12 1 6	ditto
Westminster	55	12 6 0	Walker, Parker, & Co.
Jamaica	50	11 8 0	ditto
Belgraves	35	12 0 6	ditto
Macsysafn	50	12 0 0	ditto
Milwr	36	13 2 6	ditto
Pantyffrith	17	12 11 0	Newton, Keates, & Co.
ditto	12	14 13 0	J. P. Eyton.
Bantry	10½	12 3 0	Newton, Keates, & Co.
ditto	4	9 10 0	ditto
Stronllan	76	12 6 0	ditto
Newtonards	60	12 2 6	Walker, Parker, & Co.
Machynlleth	55	12 7 6	Newton, Keates, & Co.
Bwlchgwyn	30	12 3 6	Walker, Parker, & Co.
	Total tons		562.

BLACK TIN.

Mine.	*Tons.*	*Price.*	*Purchaser.*
Runnaford Coombe	1	£54 5 0	Daubuz.

COPPER ORES.

Sampled March 13, and Sold at the Royal Hotel, Truro, March 28.

Mines.	*Tons.*	*Price.*	*Mines.*	*Tons.*	*Price.*
United Mines	118	£4 1 0	South Caradon	70	£8 16 0
ditto	110	4 2 0	ditto	59	6 7 0
ditto	103	4 6 6	ditto	48	6 11 0
ditto	98	4 10 0	ditto	47	8 15 6
ditto	80	1 10 6	ditto	40	5 5 0
ditto	67	7 15 0	Par Consols	81	6 3 6
ditto	66	4 4 6	ditto	80	5 18 6
ditto	65	4 5 6	ditto	53	5 15 0
ditto	61	7 19 0	ditto	49	4 15 6
ditto	57	4 13 6	South Tolgus	120	10 14 0
ditto	33	8 5 6	ditto	100	10 5 0
Consolidated	100	5 15 6	ditto	25	4 13 6
ditto	88	4 17 6	Trethellan	78	2 11 6
ditto	86	6 1 6	ditto	63	3 14 6
ditto	74	3 5 6	ditto	60	0 17 0
ditto	68	5 18 0	ditto	36	1 13 6
ditto	56	5 13 0	Perran St. George	80	3 14 0
ditto	55	5 2 0	ditto	59	5 16 6
ditto	41	6 6 6	ditto	42	4 4 0
ditto	40	3 0 6	ditto	20	0 17 6
ditto	39	2 7 0	ditto	19	2 12 0
ditto	37	3 4 0	Wheal Comfort	83	1 19 6
Treviskey	100	9 18 6	ditto	61	1 6 6
ditto	94	9 3 6	ditto	49	2 0 6
ditto	80	4 18 6	Treleigh Consols	71	3 16 6
ditto	67	4 18 6	ditto	36	4 18 6
ditto	59	9 8 6	ditto	18	3 0 0
ditto	56	6 7 6	Charlestown United	69	5 12 6
ditto	49	2 5 0	Wh. Ellen	27	6 10 0
Tresavean	94	2 13 6	ditto	25	6 18 6
ditto	76	3 17 6	ditto	8	2 17 6
ditto	75	4 15 0	Wh. Henry	40	6 18 0
ditto	61	3 4 0	Grmb. and St. Aub.	24	3 5 0
ditto	49	1 18 0	Polgooth	12	4 13 6
ditto	28	3 1 0	Friendly Mines	5	22 0 0

TOTAL PRODUCE.

United Mines	858	£4037 17 0	Wh. Comfort	193	£343 19 6
Consolidated	684	3359 15 6	Treleigh Consols	125	502 17 6
Treviskey	505	3602 5 0	Charlestown Mines	69	388 2 6
Tresavean	383	1275 18 0	Wh. Ellen	60	371 12 6
South Caradon	254	1927 9 6	Wh. Henry	40	276 0 0
Par Consols	254	1469 18 6	Gramb. & St. Aub.	24	78 0 0
South Tolgus	245	2425 17 6	Polgooth	12	56 2 0
Trethellan	242	865 9 0	Friendly Mines	5	110 0 0
Perran St. George.	220	882 19 6			

Average Standard £107 17 0 | Average Produce 7⅝
Average Price per ton £5 4 0
Quantity of Ore 4183 tons | Quantity of Fine Copper, 307 tons 11 cwts.
Amount of Money £21,674 3 6

LAST SALE.—Average Standard £101 14 0.—Average Produce 9⅛
Standard of corresponding sale last month, 116*l.* 10s.—Produce, 6¼.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal	225	£1258 13 6
Vivian and Sons	901	4453 13 0
Freeman and Co.	346	2101 12 6
Grenfell and Sons	592	3388 4 9
Sims, Willyams, and Co.	607	2683 16 6
Williams, Foster, and Co	1345	6928 10 6
Schneider and Co.	167	859 12 9
Total tons	4183	£21,674 3 6

Copper ores for sale on Thursday next, at White's Hotel,

NOTICES TO CORRESPONDENTS.

*** We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses—not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

"Inexperience" (Tottenham) should apply to some broker, who will readily advise him.

We have a packet of very interesting communications from Dr. Murray, which we shall have pleasure in presenting to our readers in next week's Journal.

"One of the Deluded" (Richmond).—The communication is carried to too great a length for the interest which the subject possesses to our readers. Moreover, as the matter is about being brought before the public in another manner, there is no necessity for our devoting space for the publication of what, with our correspondent, we must consider an "annoying circumstantial detail."

"An Engineering Pupil" (Greenwich). The four engines which ran on the 6th October 1829, the winner of which was to receive a premium of 500*l.* from the directors of the Liverpool and Manchester Railway, were the *Novelty*, of Messrs. Braithwaite and Ericson, of London, weighing 2 tons 15 cwts.; the *Sans Pareil*, of Mr. Hackworth, of Darlington, weighing 4 tons 6¼ cwts.; the *Rocket*, of Mr. R. Stephenson, weighing 4 tons 3 cwts.; and the *Perseverance*, of Mr. Brandreth, of Edinburgh, weighing 2 tons 17 cwts. The umpires were Messrs. Rastrick and Wood, civil engineers, with J. Kennedy, Esq., of Manchester. The conditions were, that the engines were not to exceed in weight six tons, that each was to draw three times its own weight at starting, and to go a distance of 70 miles at not less than 10 miles per hour. The *Novelty* commenced, but unfortunately bursting one of its pipes, failed of accomplishing the route. The *Sans Pareil* met with a similar accident, and was withdrawn, after it had performed 22½ miles in 1 hour 37 minutes, and was bidding fair to carry off the prize. Its greatest speed was 15 miles per hour. The *Perseverance* seems to have had no chance of success. The above-named two and the *Rocket* were, therefore, the only engines which may be said to have contended, or had a chance of obtaining the prize, which was finally awarded to the *Rocket*, this engine having run the whole distance twice, the first time in two hours 14 minutes 8 seconds, the second in 2 hours 6 minutes 49 seconds, the speed averaging in one case 11¼ miles per hour, and in the other 14 1-13th. Its greatest speed was 29 miles per hour, and its lowest 11¼ miles. The portion of the railway set apart for the trial was the Manchester side of Rainhill Bridge, about 9 miles from Liverpool, where the railway runs about 2 or 3 miles on a dead level." It must be remembered that a vast improvement has taken place in the construction of railroads since that period. In these trials the engines were only called upon to drag three times their own weight, and the best speed of the winning engine was 12¼ miles per hour; while the engines at present on common duty drag 10 or 12 times their own weight, and generally preserve a medium rate of 20 miles per hour, and the passengers' train 24 miles per hour.

Received—T. Deakin (Blaenavon)—J. J. Lake (Portsmouth).

Errata.—A few slight errors occurred in printing my letter on the Electric Telegraph, in your Journal of last Saturday. Line 26, for "of the needle, *and* which takes place," read, "of the needle which takes place;" last line but 5, for "can *do the* two indicators," read, "can *work* two indicators."—G. E. D.

*** It is particularly requested that all communications may be addressed—

TO THE EDITOR,
Mining Journal Office,
26, FLEET-STREET, LONDON.

And Post-office orders made payable to Wm. Salmon Mansell, as acting for the proprietors.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, MARCH 30, 1850.

The MINING JOURNAL is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

It gives us great pleasure to learn, as from almost every authentic statement, and every new aspect of affairs in the commercial world, we now do learn, that the sinister prophecies which were hazarded at the time when the tariff was in course of being re-modelled, and the duties on the importation of foreign and colonial ores were being struck off, that these changes would result in the grievous depression, if not in the entire ruin, of British mining, however diligently, skilfully, and economically prosecuted, are futile. We have had the satisfaction of witnessing the falsification of these forebodings in nearly every department of our wide and unwearied undertakings as a merchant people; and, in the mining branch of our engagements particularly, the mischief produced has been a negative quantity, and the advantages of the change so important as to have come with some surprise on the advocates themselves of the alteration.

The view taken by the Right Hon. the CHANCELLOR of the EXCHEQUER in his recent statement to Parliament, of the course and results of our last year's progress, is rather different from the consequences which some Cornish alarmists were continually protesting must inevitably arise out of the measures then officially proposed. So far, however, from these fears being realised, it is in evidence that the miners of Cornwall are in full employment, and at improved wages, and that the quantity of copper, in bricks and pigs, exported in 1850 was 153,000 cwts., against 85,000 cwts. in 1849; of wrought copper, 17,000 cwts. in 1850, against 5000 cwts. in 1849; and, finally, of brass and mixed metals, 23,000 cwts. in 1850, against 13,000 cwts. in 1849. It is only half an answer to say that a part of these heavy quantities have been sent into this country under the new tariff, from Australia, and from the colonies of Spain; that is much in the nature of a guess, and is not apparent upon the returns; but, even in that case, it is an evidence of how much greater a business has been done in the metals under the new regulations than under the old, and how much larger the refreshment has been to British industry, and the remuneration to British capital. Those interminable letters in the *Cornwall Gazette*, in which everything was set out in order, and yet where almost everything was in error—which were so full of figures of arithmetic, and yet have turned out as futile as figures of speech—are now proved to be false oracles, and to have been clamorous with mining alarms, when a little more discrimination and impartiality would have enabled them to diffuse mining confidence.

For a considerable period, arising from a variety of causes, the mining interest was in a depressed state. At the commencement of the present year, however, a favourable turn took place; a gradual improvement, steadily increasing, has since followed, and we can now congratulate both adventurer and miner on their present prosperous position. All interests have their alternate periods of prosperity and adversity, the latter of which the miners have severely felt, until the present year, since which the "bubble" of our century—the railway mania—has occurred. Mining speculations are now in good repute, and it will be the culpability of those interested if they are allowed to languish, and fall into that discredit under which they have so often, not undeservedly, laboured. This may be considered a harsh term; we do not wish to reflect on the legitimate speculator, to whom steady returns and remunerative interest is sufficient, but to those mercenary and unprincipled adventurers who, to serve their own nefarious ends, spread inflated and exaggerated reports to entrap the unwary and ignorant individual, who, confiding himself, trusts to their seeming honesty and simplicity to enrich him, nor awakes from his delusive dream until he finds he has been gulled of every shilling he possesses. It may be well here to observe, that with the increasing returns of mines, and the advances in the standard, many mines are being put forth; and we would recommend to adventurers cautiously to advance their monies, believing, as we do, that many projects are put forward at the present moment by adventurers wanting in *principle*, and in the absence of *principal*, to prosecute their undertakings. The fatigue and danger of descending underground, to explore and judge for himself, cannot be undertaken by all interested in mines—consequently, the adventurer must trust to others, see with their eyes, and believe what they choose to tell him. Others, mere speculators, not interested in mining operations, purchase shares with the sole view of working *them*, and, by forcing the market to a temporary and insecure pitch of prosperity, make their own gains, then retire, and leave their dupes to chew the bitter cud of disappointment at the sudden and hasty depreciation in value which invariably follows any illegitimate movements of this description, forcing him again to sell to them, or their *clique*, the property he has purchased much under its real value. The standard at present for copper ores of 8¼ per cent. is from 110 to 112, and we hear, from good authority, there is a probability that it may shortly reach 120, should the present demand for ores continue. Much as we desire to see every mine prosperously working, we must say it is with a feeling of alarm we anticipate such a rapid and high increase; as, although it will cause a temporary excitement, the depression which will necessarily follow must, we are assured, be productive of most ruinous results to every branch of industry in the county. We have always advocated that capital should be embarked in our home mines rather than in foreign speculations, and experience has proved that good Cornish copper mines have been more productive than any gold deposits which have been discovered and worked in the modern "El Dorados." One of the effects of raising the standard to a scale above its real value will deter capitalists from investing their money in our native metallurgical depots, and induce them to find an outlet for it abroad, where already so much British gold has been wantonly and needlessly lavished on foreigners, to the detriment of the children of our own soil. With the present standard, at the low rate of labour and cheap price of every description of materials, average mines can be worked advantageously to give remunerative returns; while the richer will yield, at the same time, handsome and, indeed, as we have seen in many instances reported in our columns, enormous profits. That a slight increase may take place without injury, we readily admit; but it is difficult to draw the line of demarcation, and any attempt to force it further, to an unnatural extent, cannot but be productive of incalculable evil hereafter. At present we are doing well, and it would be unwise, in a foolish and greedy attempt to better our now prosperous condition, to risk the chance of returning to the "Slough of Despond," from which we have so happily but newly escaped. In states, as well as in commercial transactions, a too great prosperity has ever been the prelude to depression. Let us, by our moderation, seek to avoid this, and render permanent a fluctuating interest. It is to confine mining enterprise within proper bounds that we address these words of caution; our experience has shown us that proceedings of this kind have inflicted, in a short period, more direful evils than years of patient industry could efface. The wealth of England principally arises from her mineral resources; to ensure a continued flourishing condition, these interests should be guided by honest upright measures, and not unhealthy exorbitant prices.

From a report in another column, it will be observed that the meeting of the ASTURIAN MINING COMPANY has been adjourned to the 16th April. We trust that the parties who attended on Tuesday will take the precaution, against the day of adjournment, of informing themselves of the exact progress of events from the appointment of the new administration; for it is quite plain, from the temper and language of the majority, and from a cursory remark of the chairman, that it was composed of shareholders who had abandoned the interest of the company, to the influence which prevailed since the 25th of Sept. In the present position of the company, the only question is, whether the policy on which the board has been acting is justifiable, and has it been so far successful? Having narrowly, and in the beginning with some suspicion, followed the transactions of the administrators, we are warranted in admitting that it would be irrational to answer otherwise than affirmatively. Any other policy would have consigned, ere this, the valuable property of the shareholders to absolute confiscation; if there be any chance of realising even a part of the original outlay, it can be only by sustaining the credit of the company, and in endeavouring to render productive the enterprise on which that outlay has been so profusely lavished.

Fresh evidences periodically come to hand, to show that the further prosecution of the works, by way of experiment, is worth an extraordinary effort. Last week we gave the opinion of "One Who has Seen the Mines," and we pledge ourselves that that testimony cannot be in collusion with the present management; for it comes from a shareholder, who has hitherto been hostile to the board, and who can have no object in misleading his co-proprietors. We have just received a corroboratory communication from an equally impartial source, enclosing a report from a gentleman residing in the Asturias, and connected with other interests. Not having space to-day, we will present it to our readers next week.

It is, therefore, equally our duty to encourage the present proprietary—to struggle against the present consequences of neglect and mismanagement—as we have already endeavoured to dissuade others from incurring unnecessary risk, or plunging into litigation. Let there be no remissness in future supervision; and, above all things, as "short accounts make long friends," let the shareholders insist on monthly, or bi-monthly, accounts and reports, which, in other mining concerns, have been found to be so beneficial in keeping alive the interest of the shareholders, and as partial checks upon the operations.

The prospects of the iron trade in Spain are especially encouraging. We have noticed that mining enterprise has given that branch of commerce an additional elasticity; whilst the predominant policy of promoting railways must hereafter greatly enhance the value of establishments like that of the Asturian Company. Under such circumstances, it can be only from personally interested and factious motives that the shareholders, whose contributions have saved the company from actual bankruptcy and endless litigation, need anticipate an opposition to that policy which they have supported as the only rational course which has been proposed to extricate the company from difficulties, and save the property.

THE IRON TRADE IN SPAIN.—The Director-General of Crown property has advertised for tenders for 60,000 arrobas of Spanish pig, and 16,000 arrobas of wrought-iron, for the Royal Copper Mines of Rio-tinto, to be delivered in 1850 and 1851. All foreign iron is excluded.

THE IRON TRADE IN AMERICA.—We learn that Sir H. Bulwer had written a letter relative to the feeling of Great Britain in relation to any proposed increased duty on iron, as an interference with domestic affairs. The ire of the protectionists had been greatly excited, but the members of General Taylor's Government very successfully defended him in the Legislature. Mr. Clay and others also considered that Sir Henry had not exceeded his duty, though they opposed the object of the letter. It was finally referred to the Committee of Commerce. At Pittsburgh, the mob feeling had been excited, and permission was sought by the sheriff to use the arms in the United States arsenal.

IRON TRADE AT PHILADELPHIA.—The ironmasters and manufacturers of England will read with interest the following comparative statement of the amount of pig and manufactured iron received in Philadelphia during the past two years:—

1849.	Bar and Sheet.	Pig and Scrap.	Castings and Blooms.	Nails and Spikes.
Chester & Delaware Canal *Lbs.*	4,568,391	41,09 ,379	3,691,825	925,986
Delaware Canal, Bristol	61,696	58,532,532	466,384	742,041
Schuylkill Navigation	7,963,290	77,490,560	6,354,880	2,582,720
Columbia & Reading Railway	10,209,500	2,062,300	1,578,900	2,790,400
Norristown Railroad	4,448,060	5,935,600	2,020,416	—
Total *Lbs.*	27,250,847	185,133,371	14,112,405	7,045,147
1848.				
Chester & Delaware Canal *Lbs.*	14,988,260	88,713,098	5,536,410	1,360,293
Delaware Canal, Bristol	1,117,515	50,743,874	109,227	*1,338,115
Schuylkill Navigation	10,223,860	29,205,120	3,071,040	1,485,120
Columbia & Reading Railway	18,730,700	7,347,400	4,229,705	7,119,600
Norristown Railroad	5,866,283	2,564,108	1,672,780	1,672,785
Total *Lbs.*	50,926,123	178,563,600	14,619,162	12,986,213

* Including 1,337,225 lbs. of wire.

A further examination into the bankruptcy of Mr. Benjamin Smith, took place before Mr. Commissioner Fane, on Monday. The bankrupt, as already stated, was a copper-smelter and silversmith, in Threadneedle-street and Lincoln's-inn-Fields; his country residence was at Bow-common. Debts were now proved to the amount of 42,000*l.*, and it is computed that the total amount will be about 160,000*l.* The assets are estimated at from 25,000*l.* to 30,000*l.* Mr. James Henry Enthoven, of Moorgate-street, merchant; Mr. John W. Webster, of Porter-street, Soho, gold and silver caster; and Mr. George W. Adams, of Hosier-lane, silver caster, were chosen assignees. The proceedings appeared to excite more than an ordinary degree of interest, the failure having excited considerable surprise in the trade, among whom the bankrupt's credit had previously ranked very high. Messrs. Crowder and Maynard are solicitors to the fiat; Mr. Linklater appeared for a creditor.

THE FIRST LOCOMOTIVE IN ABERDEEN.—On Saturday evening last, at seven o'clock, a locomotive engine crossed the Dee from the south, and entered Aberdeenshire, amid the plaudits of an immense concourse of spectators. The intentions of the directors to bring in a locomotive on Saturday were not generally known; but some few being aware of them, the news that the engine was coming soon spread, and long before the hour at which it was expected, thousands were hurrying to Ferryhill. The directors passed over, with an engine, the last six miles of the line, which now completes a railway, without break, from Aberdeen to London. The Government inspector is to be on the line on the 25th or 26th current, and it is intended that the regular traffic to the Ferryhill station shall commence on the 1st proximo.—*North of Scotland Gazette.*

MINING IN SOUTH AUSTRALIA.

We are indebted to a correspondent, at Adelaide, for the following copy of a letter which has been addressed to one of the Cornish Members:—

I felt glad to receive the acknowledgment of my letter on gold and other metals here existing; in return, I beg to say, I will not fail to communicate on matters of scientific interest, as soon as I can do so compatibly with a secret I have for some months had most sedulously to keep, but which is now on the eve of publication. It will ere long be seen that I have not been idle in the matter of exploration. I can exhibit the precious metal in very numerous places and localities over an area of 300 square miles, and here and there in cheering quantities. My papers to the London *Mining Journal* must henceforth be of interest, as much to the mercantile as to the scientific world. I am astonished that among people from many nations, the thing should be left for me to develope. The colony will soon be set in effervescence, and all eyes deflected from California; it seems to me there will be no surplus labourers for many years.

I cannot yet identify any thing of scientific interest in my discoveries: the rocks are mica, gneiss, clay-slate, quartzite, and lime—some places alternating orderly, and as often confusedly. I once thought that calcarious rock was unfavourable, but am not decided. I like to see mica, but this is not essential; and although milk quartz rock, crystal, and other varieties, are often abundant, they are not essential crystalline. Iron of any variety is a welcome harbinger, as well as the very red iron oxide, the brown gossan also of veins contains it here. I am not aware of the names of the various heavy stones of all colours which I find, about the weight of tin-stone, and of microscopic size; besides rubies of all hues, there are transparent stones of excessive hardness; should there be any particular soil giving out the metal, it is drifted far upon foreign soils by tidal or fluvial action. Any tidal, because the land, at no very remote period, has been partially, if not wholly, under water; whether the subsidence was gradual or sudden, my data do not decide. The hills and ridges very much ramify: I think the ranges, where there is anything like regularity, conform in parallels nearly north and south—a little east of north the heights above the sea level varying from 300 to 1500 feet, very numerous, precipitious, and discouraging to the traveller—the tops of prominencies being often protected by patches and veins of quartz; the middle heights especially, and some of the superior heights, are capped by conglomerate of pebbles and sand, indurated by iron or lime, as each may prevail; or else smooth well-rounded beechy matter of clean loose pebbles, sand, &c., or pure silicious sand, often supplies the place, and as often limestone, or conglomerate, forming a cemented coating on the face of a hard or soft soil—such a coating as is now seen in the bottom of the harbour, and such as is observed in calcareous sea caverns. The primitive lime being decomposed and re-deposited on other soils, the impervious coating will be long prejudicial to some parts, by preventing the absorbtion of rain sufficient for water springs. I have had proof by observation of the good arising from the breaking up of this in lines across the head of a gully, by the appearance of permanent water that never before had place. In speaking of the marine detritus lying in the flanks, flats, and sheltered positions in the hills, it is important to remark, the alluvial metals are most found on the "shelf," or at the bottom of such "wash," some inches, feet, or fathoms deep. Any one, then, familar in the study of diluvial deposits, would pursue the concentration of the waters to the aggregated metals in the gullies and large rivers. As this was my business from my youth to learn from my father (a tin streamer), I was *au fait* at the detection of them in this country. The rule of deposit being considered mechanically, is precisely such as to agree with my experience—viz.: that the veriest skin of unbroken ground is charged more richly than that a few inches deep, by reason of some reluctant grains that are not swept by rain away with the once superposed strata; whereas in the loose rolling matter of seas and gulleys, the surface is least likely to exhibit a grain. I was a long time baffled to find stray grains in the tufts and grassy sods of rivers; but, observing grains often to float on the water's surface, by the power of repulsion, somehow acquired, I refer it to this—I believe the slightest presence of animal matter will occasion the floating quality; also, that an increase of temperature, no greater than the gun can impart, would impart a repulsive power to many metals, and make them float. Gold dust, dry and warm, thrown into water, will obstinately swim as if by magic, especially loose dust, taken from one's pocket. Without a means of preventing this, the inconvenience would be serious to gold washers, who, in America, have recourse to a tree—the leaves of which being dipped into the water, destroy the spell. The beds, then, of our rivers being not only dry, but the stones hot, and infested by myriads of insects and reptiles, there is fatty matter enough, as well as heat, to account for such position of stray particles. The Government measures are such as to place things beyond the grasp of individuals of small means; consequently, I am content to be a shareholder with a wealthy and efficient local company of purchased lands; but, as the originator of gold streaming in the colonies, I am working for the public; and possibly, without a fair recognition, I have succeeded in obtaining grants of gold-giving soils at a royalty, solely my own, and am still doing all I can to obtain more, either at a royalty or rent; not knowing yet whether I shall turn them to account with parties here or at home, I shall not dispose of them hastily. A London company would do well to institute a systematic search in all our colonies, as I gather hints of its existence far beyond South Australia, in New South Wales; but, luckily, the rumour was puffed at. There is more to be done in our own colony than lies within the grasp of any single company here to be formed; and I am anxious to be engaged in such explorations. The greatest number of particles I have yet obtained from a shovelful is 27. I have not yet detected tin; nor had time yet to be satisfied about platinum, &c., associated with gold. There are heavy bodies of various aspects, separable there with heavy stones—such as rubies, garnets, &c., of all hues; there are hexagonal beryls to be picked up of all sizes, from 2 in. diameter downwards: how much larger, I cannot say.

GOLD IN SOUTH AUSTRALIA.—Letters from Adelaide to the 17th November have arrived, but which are not so late as those received by the overland mail, noticed in our last Journal. The discovery of gold in the colony is spoken of with interest, and some lately found is stated to be of exquisitely pure metal.

The *South Australian*, of Nov. 6, says—"It is the intention of the South Australian Company to begin washing for gold. That it exists in their surveys on the Onkaparinga and Torrens is certain, Mr. Giles having seen it taken out. From three shovels full of gravel, taken at random from the bed of the Torrens, near the Wool Sheds, 100 grains were extracted in his presence, and he has seen it for 10 miles along the river, on different parts of the company's property. We have seen a specimen of the gold dust; and another has been sent to London. It is in very minute particles, the largest not nearly the size of the smallest pin's head. We have also seen gold dust found in other localities by private persons. It is found in the Torrens, on the property of Mr. Charles Campbell, and at Lake Osmond on the Onkaparinga, near Balhannah, on that of Mr. Osmond Giles. For many months a company has been organising to work these discoveries. It seems likely that gold may have accumulated in the rivers for centuries past. It is known to exist in the copper ores of the colony, though not perhaps to an extent which would pay for extracting; but as the baser metal perished the gold would, of course, remain, and the natural action of the floods would carry it down the mountain streams."

At the meting of the Victoria Mining Company, the visiting committee, who had been appointed to inspect the mine, reported "that they had examined the mine, and found it in a good workable condition, offering ready facilities for stoping down the back of the gold vein, which is regular and continuous. They are of opinion that it might be made a profitable mine if worked for copper; as they have every reason to believe a good copper course has already been gone through, which would make ample returns; and expect that several other good copper lodes may be discovered, judging from the direction the Adelaide lodes take. They think that should a working fund be provided, the chances are that abundance of copper will be raised, the value of which will be considerably enhanced by the deposits of gold which will be occasionally found."

BURRA BURRA MINE.—The large engine had been fixed, and commenced working; it is of 8-horse power, and 11 feet stroke; the shaft is already 6 feet below the deepest (30 fm. level), and will be sunk to a greater depth without delay. The engine raises 20 gallons of water per stroke, 120 per minute, which is sufficient for the present requirements of the mine. The day was kept as a holiday by the men; the company's officers dined with the directors, Messrs. Kingston and Paxton, at Wren's Hotel, and a similar entertainment is to be given to the numerous mechanics who have been employed in the erection of the engine. The report from the mine is of the most favourable character, everything looking better than ever. By the use of the engine 100 whim horses are thrown out of work.

The following is an extract from a letter written by a gentleman in the commission of the peace, who is resident in the neighbourhood of the Burra Burra Copper Mines, and addressed to a friend in this country:—"Our mining interests here are getting on capitally. At the Burra Burra they have now about 800 people at work; and in a conversation I had a few days since with their secretary, who is a townsman of mine, I learnt that they could now employ from 100 to 200 more miners if they could get them. Let this be known in Devon and Cornwall. You may entirely depend on it. We want also blacksmiths, carpenters, stonemasons, &c. Good men, with ready hands and clever heads, if steady and industrious, are sure to do well. We have too many of the scruff and scrubs—there are chaps out here who would be dear at 6d. a day."

GOLD IN SPAIN.—A Granada letter of the 15th says that the people of the neighbouring villages are all occupied in washing for gold dust, which has been found in the sands about Huetor, Vega, Monachil, Dilar, and La Zubia. The writer adds—"I had the curiosity last evening to visit the hollow called Dona Juana, where the auriferous sands most abound, and I saw more than 300 men occupied in searching for gold. Being less credulous than many, I won't assure you that this district is converted into a Potosi; but what I have seen myself is, that a skilful washer may extract 30 to 40 reals worth in a day; and by putting up appropriate machinery, large amounts may be extracted."—Another letter, dated Madrid, March 21, states "that two societies had been formed in Madrid for the washing of the sands of the Douro. The advertisements of these companies, written in the Andalusian style, full of pompous expressions and exaggerations, first set the mercurial imaginations of the Grenadians in movement. A company, called the 'Don Roderick,' has discovered a very rich auriferous sand about half a league from Grenada; and though they called in the aid of the authorities to protect their property, yet hundreds of men, women, and children are there washing portions of sand in every kind of utensil, even in plates."

Letters from Buenos Ayres state "that in the province of San Luis mining pursuits were very actively prosecuted, and that the gold 'diggings' also gave employment to 600 persons. The largest lump of pure native gold found at Mendoza was 8 ozs. 2 dwts. in weight, and 250 lbs. of gold dust had been sold to speculators, at $13 per ounce."

SILVER FROM IRELAND.—The steam-ship, *Ajax*, which has just arrived in the river from Cork, with a general cargo of Irish cattle, and provisions of various kinds, has brought 17 boxes of silver coin, consigned to parties in this country. This is a novel importation from the sister isle, and is, therefore, of much interest.

ARRIVAL OF SPECIE.—The *Maria* has arrived at Liverpool from Huanchaco (west coast of S. America) with silver and other rich metals, valued at $92,000.

GOLD DISTRICTS—HINTS TO EMIGRANTS.

BY E. HOPKINS, C.E., F.G.S.

It was formerly believed that a country was rich when it had a great deal of gold; but this popular delusion is now passing away. Spain became poorer after the discovery of America, because her national industry was disordered and ruined by the feverish excitement, the gambling spirit, and the false expectations produced at the time. The gold merely passed through her hands to spread over, and for the benefit of the rest of Europe, from which she was obliged to import everything that from the want of home manufactories made it necessary to procure from abroad. The real richness of a state is, therefore, more dependent on the conversion of an inferior raw material, such as iron, to a high price by means of its internal industry, than on deposits of gold. Indeed, there is an old Spanish proverb very applicable to the majority of gold mines—viz.: "That the possessor of a gold mine will starve with hunger if he works it on his own account"—so it is with a nation possessing gold mines. This unfavourable impression and real bad effects of gold mines proceed from the fact of persons thinking that all gold deposits must be valuable, and that every spot where gold was detected was worthy of being worked, in preference to an ordinary employment; and this mistaken view has led to much waste of useful labour, and great amount of capital.

Those countries where gold mines predominate present, generally speaking, scenes of misery. The population neglect the cultivation of the soil, and confine their attention to the extraction of the precious metal; they lead a life only a few degrees above the animals of the forest; total strangers to what we call domestic comforts; pay high for all ordinary necessities; are subject to many diseases; neglected by their fellow-creatures, drop off, and are soon forgotten, and the produce of their arduous and painful labours pass from them into the hands of other persons, who have no other feelings than the attainment of wealth at any sacrifice. Man is looked at as a mere instrument, like a pick, who, when he becomes worn out, or incapacitated from constant working, is discarded as useless lumber, in a country where no charitable resources exist. Nor is this feeling confined to the gold districts alone, but is also too often apparent at a distance, amongst those who may send the men out. Those who read the embellished reports and prospectus in newspapers respecting the gold regions should reflect well before they leave their homes, be they ever so humble, as they may be in possession here of what gold cannot purchase in distant countries, independent of losing the connection of those who may feel a real interest in their welfare.

It is true some have done well there, like in other countries; but collecting gold is an arduous and laborious work, and very different to what it is commonly represented. A party of Cornish tin streamers, or even "navvies," may obtain great riches in the deep recesses of the Sacramento, if well prepared to undergo the task and labour *per se*, not otherwise. There are many in California who have left this country that would be glad to be back again; but, alas! the magical influence of the name of gold, in spite of painful toil and frequent disappointment, is often too great to induce the seeker, whenever he commences, to relinquish his task for more profitable employment. Sometimes the owner of a deposit, or a mine, will keep working it at a loss, merely for the sake of entrapping the unwary capitalist at some convenient opportunity; and in order to succeed in this, he will employ some of those plausible, irresponsible persons to come forward and report, so as to effect the object in view. It is those characters who keep up the flattering accounts from the gold districts, and make it appear that gold is so abundant, that it can be obtained without labour. A few rich pools and lucky gold-washers are brought forward as examples of the richness of the whole country, and the quantity that can be obtained by merely going to California. Many of those who have gone there have already found out, to their cost, that it is not all gold that glitters—that it is obtained with great toil, and retained with great difficulty, owing to the enormous price demanded for the common necessities of life.

In consequence of the scenes above described, the selfish and immoral tendency, and the departure of persons who have any regard for themselves, and who can earn a respectable livelihood in a civilized country, the diggings, or separate workings, or mines, which may belong to a company, are often left to the charge of incompetent individuals, and whose principles may be sufficiently pliant to be rendered capable of being made to suit every purpose, and who have nothing to lose and all to gain, and who are left at liberty to act according to the impulses of their caprice. The honest industrious man barely escapes from being injured in health and prospects; such is the experience of the past, and such are the daily accounts of scenes and acts, we receive from many of the diggings and foreign mines.

The actual profitable results are often looked at as quite secondary objects; provided they write plausible reports of progress, to keep the credulous shareholders for the time being in good humour, their doings are highly satisfactory. They often alter the name of the place, merely for the sake of changing the bait for new comers. When persons intend to take a *bonâ fide* interest in foreign mines, be it gold washings or any others, it is indispensably necessary to know most particularly who is to carry it on, and what kind of checks can be established on the acts and expenditure of such a person in control. Rich specimens are often found in poor mines, and poor specimens in rich mines; so it is with the mines themselves. Some rich mines are worked with heavy losses from bad management, and poor mines worked with profits by good management—consequently, it is not sufficient to receive a good report of a mine. The person in charge must be proved competent to the task, in principle as well as in judgment, otherwise the speculations would be as ruinous as too many mines and diggings have been, and still are, from that very cause. It is the great difficulty of correcting this evil that prevents many of the foreign mines from leaving profits, and deterring others from being worked. At this moment there is a large disposable capital ready to be invested in mining; but the want of confidence caused by loose reports, and other questionable proceedings, keep both the capital and some of the home mines, as well as the foreign, from being put at once into useful activity.

MINING IN FRANCE.—There is a general improvement in mining operations, and the last accounts from St. Dezier, St. Etienne, &c., are very satisfactory. The meeting of the iron and forge masters is expected to take place early next month, when several resolutions are to be agreed upon relative to a reduction in the present price of iron, so as to compete with the iron trade of Belgium. A meeting of the large colliery proprietors is also announced for the same purpose, as regards coals. In order to give an emulation to mining adventures, the Government intends awarding annual prizes to those who have introduced the best systems in mining operations, not only in the mineral or metallurgic districts, but the coal mines, for the preservation of life from accidents, fire-damp, &c., and the improvement in ventilation, which will give a great impetus to this important branch of industry. The spirit of mining enterprise is rapidly on the increase in France. To explore the "El Dorado," California, two companies have been formed, one, "La France," with a capital of 600,000 fr. (24,000*l.*), in 12,000 shares of 2*l.* each, which, as a commencement, is going to send out 50 experienced miners in the course of next month, with a director, engineer, doctor, &c., well provided with materials, iron houses, mining implements, clothes, arms, provisions, &c., and Siberian tables, or troughs, for the washing and amalgamation of the auriferous sands and ores. The other company (French and American, of San Francisco) will despatch their first vessel on Monday next, from Havre, and another in the course of the month, also well provided with everything requisite for commencing immediate operations.

INCREASED EMPLOYMENT FOR MINERS.—The stopping of the different mines in the parish of Breage during the last two years has been the occasion of great poverty among the working classes, and has had a very depreciating effect upon all kinds of property. But the old adage is, that the tide never runs out so far but what it comes in again, and it is gratifying to state that matters are beginning to assume a much better appearance in this parish. In addition to the paying mines, several new adventures are about to be started. The Great Work Consols is employing a large number of people, and giving the adventurers good dividends every three months. Wheal Vor, with a vast amount of machinery on the mine, was abandoned two years ago, and a great part of the machinery sold, but in consequence of a re-action in the market, she has been recommenced, and within 18 months a standing debt of about 12,000*l.* has been paid off, and on Wednesday last, at their meeting, a dividend of 30*l.* per share was paid, the mine being, we are informed, at present in a position to pay dividends for years to come. Wheal Fortune, near Breage Churchtown, is to be worked at once by a large and wealthy party of adventurers. Sidney Cove, which has yielded immense wealth, is about to be recommenced, under very efficient and able management. South Wheal Fortune has been working about two years, during which time she has produced many thousand pounds worth of ore, and never looked so well as at present. Wheal Rinsey, and several other speculations, we hear, are also about to be started, which must prove a great boon to the population in the neighbourhood.

Two workmen in the Clyde Bottle Works, Glasgow, having quarrelled, one of them seized a red-hot iron rod, and ran his assailant through.

BANWEN IRON COMPANY—WINDING-UP.

Master KINDERSLEY proceeded, on Tuesday, pursuant to adjournment, to continue the settlement of the list of contributories of this company. The first case of any interest called on was that of Mr. Rowland J. Browne, represented by the deed a holder of 2500 shares.

Mr. BRISTOE, on behalf of the official manager, said the facts of the case, as regarded Browne, were, he believed, as follows:—Mr. Browne was the lessee of the company, and the arrangement which had been entered into with him by the directors was to this effect—that he should have 2500 shares without paying anything for them, and that they should be entered in his name, as if they had been paid up; that is the position of these 2500 shares. In the lease which Mr. Browne had from his family, there was no clause entitling him to make a grant of the land or the mine to the company; but in the lease which he made to them, there was a clause by which he was enabled to forfeit the document in case the company should not, by a certain time, have erected two blast-furnaces; and that not having been done, Mr. Browne contended that the lease had become forfeited; while he also contended that he had in no way incurred any responsibility in respect of the 2500 shares. Now he (Mr. Bristoe) contended that such an argument could not hold good, because if the company had gone on prosperously, Mr. Browne would have had all the benefits arising from the 2500 shares. Under these circumstances, he could not see how Mr. Browne could seek to rid himself of the responsibility attached to these 2500 shares instead of 200 shares, for which only he admitted his liability.

Mr. WILKINSON (late solicitor to the company) said that Mr. Browne was to have had the 2500 shares presented to him as fully paid up, in consideration of the lease he had given the company—that there the agreement had been clogged with other conditions, not at all advantageous to Mr. Browne, and which he would wish to explain to the Master. One of those conditions was that, when the company should be at full work, Mr. Browne was to receive no profits on those shares until all the other shareholders had received 20 per cent. It was also understood that the number of shares to be given to Mr. Browne should be equal to one-fourth of the whole number subscribed for; so that if the whole number originally intended to be issued should not be taken up, then the number to be given to Mr. Browne should be equal to one-fourth of the whole number of shares actually taken up. Under these circumstances, the Master would have to strike the proportion of the number of shares Mr. Browne was to be put down for, according to the number taken.

Mr. BRISTOE could not see what effect all this could have. Mr. Browne had agreed to take 2500, and the question now was, was he, or was he not, to be held liable for them?

The MASTER: Were these 2500 shares to have been subject to the calls?—Mr. WILKINSON: No, Sir; if the whole number of shares originally intended to have been allotted should not have been taken up, then Mr Browne was to have had one-fourth of all that should be taken, for the consideration already mentioned—that he cannot be called on to take any responsibility in respect of these shares, because he never paid any contribution whatever for them.

The MASTER: I understand Mr. Browne's case to be this—that he was to derive no profit from those shares, be the number of them what they might, until all the other shareholders had been paid 20 per cent.; and, therefore, it is contended that, as he had gained nothing by them, he could not be held liable for any loss.

Mr. WILKINSON: Yes, Sir; he contends that no calls could have been made upon him in respect of these shares.—The MASTER: But suppose the company had gone on prosperously, then these shares would have been profitable to him.—Mr. WILKINSON: Not under the circumstances already stated; besides, he never intended to sell any of those shares.—The MASTER said he would allow this case to stand over for the present.

A long and very desultory proceeding ensued, in endeavouring to fix the liability of various shareholders,—and which, as affording an insight into the mystery of "bringing out" a company, and the practices sometimes resorted to in procuring "good names for a prospectus," we shall hereafter refer to. One of the "esquires," we may add, was a "man who swept the office, and was paid 10s. a week for his services."

KILBRICKEN MINING COMPANY—WINDING-UP.

The adjourned meeting, for the completion and conclusion of the evidence of Mr. Crockford, was held before Master Richards, on Tuesday.

Mr. CROCKFORD having been sworn, in answer to questions from Mr. Rogers, said: Mr. Brand was secretary to the company for two years; I gave him directions, as one of the directors, to make entries in the books; I am not sure that I did not desire him to make the entry of 1500*l.* now shown me. At the meeting referred to by Counsel, where the minute states that the resolution was carried unanimously, there were several shareholders present, but I cannot say how many; the resolution was proposed by Mr. Gainer, and seconded by my brother; it was at the meeting held in July, 1848; I cannot now say whether any more shareholders attended the meeting than those who signed the book; there were two meetings held that day, the general meeting at 2 o'clock, and the special one at half past 3 or 4; I do not think I had a proxy from Mr. Debsboro, but I told him of it afterwards, and he treated it as a joke; the names were signed in the book as the shareholders left the room, after the meeting; Mr. Debsboro is, I believe, in London, and Mr. Evans in Ostend; I have not heard anything of the latter for more than two years. The works at the mine ceased in July, 1848; from looking at the books, I now see that the works underground must have ceased in November, 1147; my father bought the mine 10 years ago; it was on the 22d of July, 1848, that I first thought of buying the mine myself, and I was induced to do so, as many of the former shareholders said they were willing to continue, and form a new company; I never formed any scheme for getting hold of the mine myself; I thought it possible to form a new company from the old shareholders, and they only refused to go on because so many others were in arrear; I was stopping at the Royal Hotel at Slough, just before the sale, and I went from thence to Clare. I think, if the Winding-up Act had been passed at the time, I would not have bought the mine, for I might then have seen my way more clearly out of these liabilities; my brother bought ten shares, and paid the money into the bank to my account, and I gave him 50 shares besides; I have no recollection of the payments made, except from the entries I see in the book, but from them I say they must have been paid.

The MASTER observed that, with regard to the entries in the book, which Mr. Rogers sought to saddle Mr. Crockford with the responsibility of, those entries might have been made by the secretary for the time being, or by Mr. Crockford's direction. He should also say that he thought Mr. Surmon, who attended for Mr. Crockford, had afforded them every facility and courtesy during the proceedings.—Mr. SURMON said, he had no object in attending but to elicit the truth.—Mr. ROGERS said he did not think they were likely to get at that here.—Adjourned till Wednesday.

On Wednesday the Master again proceeded with the settlement of the list, but there was only one shareholder in attendance.

The SOLICITOR, to the official manager said, he expected that Mr. J. Wyld, M.P., would have been in attendance, in reference to the shares for which he was sought to be made liable.—The MASTER said that, perhaps, it would be but courtesy to that gentleman, to send him another notice, as circumstances might have prevented his attendance.

The SOLICITOR said he would do so, and the proceedings were then further adjourned.

INDEPENDENT ASSURANCE COMPANY.—On Friday Master Tinney appointed Mr. G. Hutton, accountant, official manager, to investigate and wind up the affairs of this concern, which, according to the statement of the petitioners presented to the court, was established in 1848, with the view of extending the benefits of life assurances among the poorer classes, by granting policies for securing the payment of sums of money and for receiving premiums thereon by weekly, monthly, and other instalments. The directors were—Lord Teynham, chairman; Alderman Farebrother, Mr. Purton Cooper, Lieut.-Colonel Dean, and Messrs. R. Williams, W. Holt, F. J. Clarke, N. Hagan, R. Swift, J. H. Thompson, and W. Baring. The proposed capital was 100,000*l.*, and each of the petitioners subscribed for 150 shares. The shares taken amounted to 2070, but no deposit was paid on 543, nor the first call on 692. Having raised a capital of 614*l.* only, and borrowed 1000*l.* from their bankers, the company commenced business. Petitioners allege that the affairs were managed in a costly and extravagant manner; that there was an unnecessarily large staff of officers, at unnecessarily large salaries; that the expenses of the company far exceeded its means; that the directors had liberal allowances, and that shortly before the company failed it was urged that they should receive no remuneration until the concern was in a condition to afford it, and that they should forthwith refund what they had received. Policies were granted, and the premiums payable thereon received; but the paid-up capital and money borrowed had been exhausted in carrying on the business. The subscribers declined to pay the deposit and calls, while policies to the amount of 3000*l.* have become payable, and others to a large amount are daily expected to fall in, and there are no funds or assets wherewith to meet them. The managing director was dismissed, and others either neglected the business, disqualified, or became absentees. As 20 qualified shareholders could not be got together, nothing could be done, and in August last the company ceased to exist, with creditors threatening, encumbered with a large amount of debts, with no existing assets.

DIRECT WEST-END AND CROYDON RAILWAY.—In the winding-up of this concern before Master Tinney, on Wednesday, he decided that the name of Earl Talbot should be placed upon the list as liable, his case not being distinguishable from that of Major Beresford and other members of the managing committee. The case of Messrs. Carr and Studely was resumed, and, after considerable resistance, the Master held that, notwithstanding the obliviousness of both these gentlemen, of which he could not give them the benefit, he must, in accordance with the evidence addued, decide that they were liable. It was argued on the authority of a decision of Vice-Chancellor Knight Bruce, that in cases where an indemnity was given, the parties, though they might have acted, were not liable, but contended, in reply, that this decision only applied to a specific case, and was not intended to be of general application.

SHEFFIELD AND RETFORD BANKING COMPANY.—Master Blunt having settled the list of shareholders, has made a call of 1*l.* per share on each to defray the outstanding liabilities of the concern, which was started with a capital of 300,000*l.*, in 6000 shares of 50*l.* each, and originally under the title of the Sheffield Borough Bank. In 1842 a branch was opened at Retford, and business was carried on until 1846, when it was discovered that affairs were greatly embarrassed. A committee of the shareholders was appointed to realise the assets and discharge the liabilities; but the latter, notwithstanding, were not wholly discharged, and are now reported to amount to 23,000*l.* In 1848 actions were commenced against shareholders for debts which the company did not pay or compound for, and execution was threatened against the shareholders. The parties on whose petition the proceedings have been taken are, Messrs. Younge, Hounsfield, and Johnson, of Sheffield; Mr. Hawksworth being the official manager.

STAFFORDSHIRE AND SHROPSHIRE RAILWAY.—An order in Chancery has been issued for winding-up this company's affairs.

TRING AND REIGATE ATMOSPHERIC RAILWAY.—An official manager has been appointed to wind up this affair.

COLONISATION ASSURANCE COMPANY.—The Parliamentary committee have passed the preamble of this bill, with some amendments, the object of the promoters being to purchase, exchange, or surrender, and for cash, annual or periodical payments, determinate or not so for life, and for other considerations, to sell lands and tenements in the colonies and dependencies of the British empire; and to carry forward emigration to the colonies; and to obtain the premiums or bounties in money, land, or land scrip, becoming due by the transport of emigrants.

Original Correspondence.

THE GRAND EXHIBITION—PROPOSED BUILDING.

SIR,—As there seems to be some doubt in the public mind as to the suitability of Hyde-park for the public building intended for the reception of the works for the Grand Exhibition of 1851, I venture to submit that the very best site would be Primrose-hill, to the north of Regent's-park—the following reasons for which, I presume, cannot be disputed:—

It is easily accessible in every direction by wide and excellent roads:—the London and Birmingham Railway runs close to it;—it is not a very great distance, and with wide and direct roads leading to it, from the termini of the Great Western and the Eastern Counties Railways;—it is very little further from the Waterloo-bridge and London-bridge termini of the South-Western and Greenwich Railways than the proposed site in Hyde-park;—it is the finest possible site from which our wonderful capital can be best displayed to foreigners;—the temporary accommodation of millions of visitors must be provided for, and the extensive open fields in the neighbourhood afford this accommodation, by covering them with tents and temporary buildings, which, if the exhibition does not take place until after the hay harvest, would create no damage, and be highly remunerative to the proprietors, or lessees, of the ground;—it is a most healthy position, and the beautiful scenery of Highgate and Hampstead to the north, and of Regent's-park in front, offer every combination to render the site very attractive, and multitudes can assemble there without being a nuisance to the neighbourhood;—the vicinity of the Regent's Canal, for the easy transmission of many heavy goods, is another advantage possessed by the proposed site;—the ground of Primrose-hill already belongs to Government; therefore, there is no money required to purchase it;—the abundant markets of Islington, and those north of the City, are immediately contiguous, and it is surely necessary to consider the accommodation and comfort of the numerous host of visitors, especially foreigners, who may be drawn to the exhibition.

Where are the above advantages to be had in the damp grounds of Hyde-park, bounding Rotten-row?

I would propose that a noble and permanent circular building should be erected on the summit of Primrose-hill—a building something resembling the Halle aux Blé, at Paris; and surrounding the dome there should be a grand and wide terrace 24 ft. in width (supported on the radiating walls, which would support the segments of the dome), and raised 16 ft. above the level of the ground. Under this terrace different apartments, for the reception of many of the works of art, could be constructed, and the exterior might be a colonnade, supported on iron columns, such as those lately taken from the Quadrant, in Regent-street.

Surrounding the central building, at the distance of 24 ft., I would have another circular building, embracing the whole of Primrose-hill, the roof of which should not rise higher than the terrace of the central building, so as not to obstruct the view in the least from the terrace, and, if necessary, another circle of building surrounding the former, which would give space for all that is required; these might be temporary. Place the marble arch of Buckingham Palace at the north front of Regent's-park, and lead a fine avenue to the central building, and thus would be created a new and most attractive feature to the north of our great metropolis. The permanent central building would at all after times be a striking ornament, and permanently useful for many exhibitions during the fine months of successive years, and in the winter season a magnificent hall for public lectures, musical entertainments, &c. Time presses, or I would send you a slight drawing, which would convey my meaning better, perhaps, than my words can.—A MILITARY AND CIVIL ENGINEER: *London, March* 25.

THE SCOTCH PIG-IRON TRADE.

SIR,—Having from time to time observed articles lately in your Journal, in reference to the production, cost, &c., of Scotch pig-iron, which are calculated to mislead, and knowing that you wish to correct error and advance that which is correct, for the information of your subscribers, I have at length determined to address you on the subject, having hitherto refrained, hoping that some other parties might do so; but as several articles have also recently appeared in the local papers, having a tendency to depress the trade, and destroy the confidence of parties at a distance, I beg to make the following remarks:—At the close of the year, the stock of pig-iron in Scotland, in makers' and storekeepers' hands, was variously estimated from 165,000 to 195,000 tons—the former quantity being the nearest correct; and, as the present price of iron is not remunerating to the makers, it is not at all likely that any more furnaces will be put in blast; it may, therefore, be safely assumed that the make for the present year will not exceed 640,000 tons. The foundries in this neighbourhood being much better employed this year than during the last, as also the Malleable Iron-Works, it may confidently be expected that, should the export demand only keep pace with that of last year (though in all probability it will be considerably more, as Scotch pig-iron is finding its way into almost every market in the world), there will be a reduction of stock at the close of the present year, instead of an increase. Our local newspapers insert from time to time the shipments from Glasgow, and draw comparisons therefrom; but, owing to the large quantities of iron now shipped at the outports, conveyed there by railway from this, the exports from Glasgow are no criterion. Shipments direct from this have fallen off this year, owing to several reasons. The first, very boisterous and bad weather in the early months of January and February, and great scarcity of vessels, which continues in some measure to the present time; and from founders, &c., in Lancashire and the north of England having drawn their supplies from Runcorn and Fleetwood during the time of low charges by the railways and canals, so that the stocks at these places are reduced. They have at present through those districts been working on their supplies, and, when they require to come into the market again, they must look in a great measure to Scotland.

From the foregoing, it will be seen that the prospects for Scotch pig-iron are far from gloomy; and when the extraordinary enterprise of our engineers is considered, whether in the construction of tubular bridges, in shipbuilding, as also in housebuilding, it may reasonably be expected that the demand will fully keep pace with the increased production, and a fresh impulse will be given to the industry of the country.

March 27. A SUBSCRIBER.

ON THE PURIFICATION OF COAL GAS.

SIR,—Being an old and constant reader of your valuable Journal, may I ask you to find room in your next publication for the following few *facts*, if you should consider them, in this age of "cheap gas," of sufficient importance. Being about to make some extensive alterations in our arrangements for purifying coal gas, and finding considerable difficulty in disposing of the lime after we had done with it in the purifiers, I determined upon trying some other material than that which we had been in the habit of using; I, therefore, made use of the sulphate of iron, but being afraid of infringing Mr. Johnson's patent for the purification of coal gas by the agency of metallic salts in a *dry state*, the idea suggested itself of first *dissolving the salt*, which I did in boiling water, and then took it up again by using an absorbent. I used "saw-dust," and found it a very convenient vehicle; but being at the time very short of room in the purifiers, I added a quantity of finely sieved lime in a dry state to the saw-dust, after it had absorbed the solution of the sulphate of iron, and then mixed the whole intimately together, and placed the mixture in the purifier upon the same sieves as we had previously used for lime. The gas in its impure state was then allowed to percolate through the mixture, when, by applying the acetate of lead test, I found that the sulphureted hydrogen was arrested; but I could discover throughout the whole experiment traces of ammonia. After 1500 cubic feet of gas had passed through, I found that the mixture had exhausted its purifying influence, and had it removed from the purifier to an exposed but dry situation; it had then a very *black* appearance; I suppose that sulphuret of iron had been formed. After it had lain exposed to the atmosphere for some time, a very curious change took place; the mixture had lost its *black* colour, and had assumed a brownish cast; indeed, I feel fully persuaded that the mixture had been converted, by the influence of the atmosphere, from a sulphuret of iron to an oxide. I then moistened it with common water, and placed it in the purifier as before, when no less than 2400 cubic feet of gas were purified before any trace of sulphureted hydrogen was detected. The mixture was again removed from the purifier, and exposed as before, when apparently the same change, both in colour and constitution, took place. For a third time was it placed, after being moistened with common water, in the purifier, and in this experiment no less than 3050 cubic feet were purified, or cent. per cent. upon the first trial; thus have I been making use of the

same materials over and over again, the same changes continually taking place in the mixture. When in the purifier, a black sulphuret of iron is formed; place it in the atmosphere, and it becomes a red or reddish oxide of iron, capable of being made use of again for the same purpose. Now, Sir, if my theory of the matter be the true one, I think the result of the experiments most important. But whether true or false, as regards my theory, or *rationale*, the practicability of purifying coal gas by the agency of the sulphate of iron, first being dissolved in water, then taken up again by some absorbent, say "saw-dust," and afterwards mixed with a portion of lime, previous to being placed in the purifier, and using the same over and over again, not merely twice or thice, but an indefinite number of times, is established—it is a fact, and one fact is worth any quantity of theory. I am still going on with the experiments; I make use of 112 lbs. of the sulphate of iron, 1 bushel (or about 40 lbs.) of finely-sieved lime, and about 5 bushels common sawdust.—W. PHILLIPS: *Gas-Works, Rugby, March* 26.

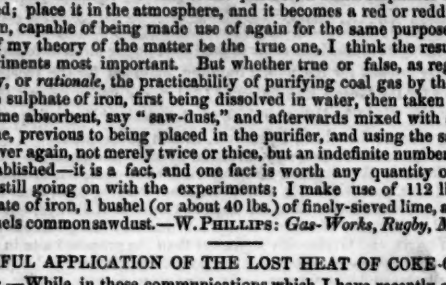
USEFUL APPLICATION OF THE LOST HEAT OF COKE-OVENS.

SIR,—While, in those communications which I have recently addressed to you, I have spoken of the application of blast-furnace gases (on which subject I have yet much to add), yet I believe that, on the other hand, a few details relative to a different method of producing steam in iron-works, free of cost, may not prove devoid of interest. The method I allude to is now applied with complete success at all our iron-works; it consists in producing the steam by the lost heat of the coke-ovens. Though almost unknown in France, this method is now nearly universal in Belgium, where it is much preferred to the use of blast-furnace gases, and that for very satisfactory reasons, which are, as far as I am aware, peculiar to the country, and, therefore, worthy of special notice.

Most of the iron ores used in the works of the Liege coal basin are yellow hydrated peroxides of iron found in the mountain limestone (*calcaire superieure* of M. Dumont), or between the limestone, or dolomit, and the schists of the coal formation—that is to say, in precisely a similar geological position to the large masses of calamine and blende worked by the great zinc companies, La Vieille Montagne, La Nouvelle Montagne, La Societé de Corphalie, &c. Most of these iron ores, then, contain a considerable proportion of oxide of zinc; some—for instance that of Angleur, near Liege—as much as 13 per cent.; the average being from 1½ to 2 per cent. This zinc is reduced and volatilised in the blast-furnace; it ascends with the gaseous current, and burns simultaneously with the gases, producing oxide of zinc, which is mostly carried away with the gaseous products of combustion, an insignificant proportion remaining attached to the inner surface of the furnace, near the mouth, in a compact and exceedingly dense form; it is called "cadmie," and, after some months, forms layers of 18 to 20 inches in thickness; it is then detached—an operation of some difficulty. The last time we cleared the cadmie from one furnace, we removed above 6 tons, consisting of oxide of zinc, with a small proportion of oxide of lead and metallic lead.

Now, it will readily be perceived that this circumstance is a very great obstacle to the application of blast-furnace gases. The trial *was* made some few years ago, at Selessin, near Liege; but the conducting-pipes were soon filled with oxide of zinc, large stalactiform masses of white oxide surrounding the boilers, adhering to every part of the apparatus; the quantity of oxide removed from the pipes amounted to above 100 tons in the course of a few months. The difficulties attending this constant stoppage of the pipes were so great, that the system was at last abandoned. Since that period Messrs. Richard and Matthey, engineers, at Seraing, have obtained a patent for a mode of condensing the zinc and purifying the gases at their exit from the furnace. Their method consists principally in injecting into a cylindrical tube, through which the gases pass, a constant shower of water, finely divided, like rain, and injected with force. Their ideas have not yet been carried out in practice, and, therefore, it is difficult to say whether the required end will be attained; if it be, the subject is of great importance, as while, on the one hand, the gases purified can, without inconvenience, be turned to account, on the other, a large quantity of oxide of zinc will be obtained, which is now entirely lost. Yet, until this question is satisfactorily decided, the difficulties in the way of the employment of blast-furnace gases, where iron ores containing much zinc are used, are too considerable, and therefore the preference is given to others of obtaining heating power, and particularly to the use of the lost heat of coke ovens.

In Belgium, the lost heat of coke ovens was first used at Couillet, and other works of the Charleroi coal basin. There the flames first passed underneath the coke oven through a series of horizontal flues, whence they were conducted beneath the boilers. The heat of radiation was not employed in this method. Mr. Matthey's engineer at the Seraing Works was the first who made use of the heat of radiation of the charged coke oven—thus obtaining a very much larger proportion of heating power. The arrangement adopted at Seraing and Ougrée, which has worked very successfully since, above a year and half, is that represented in section in the



accompanying engraving:—*a* is the boiler; *b*, the heating flues, which surround it, and which convey the burnt gases into a chimney, placed at the extremity, which chimney rises to a height of about a foot, and is furnished with sliding valves to regulate the draught; *c* is a cast-iron support for the boiler—one of these is placed between each coke oven; *d* is a cylindrical chimney, forming the communication between the coke oven, *f*, and the flues, *b*; this chimney is covered by a sliding square fire-brick, *e*, which can be drawn backwards and forwards by an iron rod; *g*, *g*, are two vertical chimneys in the thickness of the masonry. Communicating with the coke oven, and closed at top by a moveable brick, there is a small rectangular canal of cast-iron, which conveys the air from the exterior to the superior orifice of the chimney, *d*; this air serves for the purpose of effecting the combustion of the gas, immediately on its exist from the coke oven. Under the boiler is a thin partition wall, running from end to end, so that the flame issuing from the ovens does not immediately go in the direction of the chimney, but flows in the contrary direction till the end, when it turns the partition wall, and is then drawn along the other side of the boiler towards the chimney. Above the boiler is an empty annular space of about 9 or 10 in., where there is an immoveable layer of air, when the heat is required to be concentrated, and a strong draught into the chimney when the boiler is required to be rapidly cooled for cleaning. Under each boiler we have five ovens, which are charged at different stated hours of the day. Each oven is charged with 3 tons 5 cwts. of coal, which remains in the oven 24 hours. The covers over the chimneys, *g*, are closed, and that over *d* is opened. We obtain 10-horse power from each coke oven. When the boiler has to be cleaned out, the slide, *e*, is closed, the chimneys, *d*, are opened, and doors placed in the lateral walls, effecting a communication between the flues, *b*, and the exterior are opened, thereby occasioning a powerful draught into the chimney. The coke ovens proceed as usual. There is a remarkable difference in the earthy deposit in the boilers now to what it was when the boilers were heated in the ordinary manner; then the deposit was so hard and compact, that it had to be broken with the hammer and chisel; now there is not the slightest particle which remains attached to the boilers; it is all in the state of suspended mud, easily removed. I attribute this to the much larger heating surface. The heat on any particular part of the surface is much diminished in intensity. I shall, in a future communication, give some experiments on the quantity of water converted into vapour by the heat produced by the combustion of the gases proceeding from the carbonisation of a given quantity of coal.

Ougrée, Liege, March 16. E. MONTEFIORE LEVI.

THE VENTILATION EVIDENCE.

SIR,—I would make a few remarks on the very able evidence of Mr. George Elliot. He touches on points so closely involving the true principles to guide a discussion on the question of inspection, and exhibits so right a sense of the real meaning of that hackneyed epithet, "education," which passes, under the existing mania, from mouth to mouth, as words do with persons labouring under a particular insanity, with no reference whatever to its real signification, that individuals engaged in many other enquiries besides that of colliery management, might derive great light and instruction from duly considering Mr. Elliot's evidence. He states "We have viewers who serve an apprenticeship; they are regularly indentured, and pay a premium, perhaps of 300*l.* or 400*l.*, to learn to be viewers; but when they are out of their time, they, perhaps, are not the persons you would put exactly into a situation of that kind; they are educated for a higher office, to have merely a general superintendence, and not to be the working men in the matter."

Now, to this system of keeping men idling above ground in "higher offices," may we not trace the source of two evils; first, a deficiency of working talent underground to prevent accidents, and next a call on the part of those persons who have invested their means in incapacitating themselves from being "the working men in the matter," for the Government to create new offices, suited to the incapacity so acquired, so that they may have the occupation they are fit for, "merely a general superintendence." There is a prevailing notion that running the eye over black characters stamped upon paper, and tracing the same with a pointed instrument, called a pen, will, if persevered in long enough, introduce all persons, without further trouble, into a practical acquaintance and relish for those rougher mechanical acts, by which the mass of mankind have to earn their daily bread. The consequence is that, from menial servants upwards, all are fitted for a "general superintendence," or looking about, but very few are fitted to be "the working men in the matter." We have exploded the wisdom of the Hebrew monarch, and adopted another maxim, "train up a child *out* of the way he should go, and when he is old he will find his own way into it." In truth, a silly passion for reading and writing, irrespective of all other considerations, is frittering away the understandings of every class of society. All seek for a "higher office," than to be "the working men in the matter." A person whose hourly business is to be in writing and casting accounts, will do it the better for being early trained to it. Why, then, is it to be expected that a man whose business is to be ploughing, or hewing of coal, or seeing these things properly done, will effect them the better for being trained to something else, which involves an ignorance of them? That profound society of noblemen and gentlemen, who some years since lent their names to carry out a private bookseller's speculation, did all they could to encourage these foolish notions, adducing instances of men in humble life who had worked their way to literary or scientific eminence. But they mistook the matter altogether; the fact of these instances proved that it was unnecessary to make men idle that they should be great; that the channel was perfectly free, and that where talent and character existed, which deserved distinction, the path was open to it. No greater blunder can be committed, either in public or private life, than encouraging young people to become "geniusses," by taking them away from the practical duties of their station. Reading and writing, or, as it is nicknamed, "education," is in itself a merely frivolous and trifling thing; it *may* be *applied* to great objects, or to little objects, to good or to bad; intrinsically, it is a thing of nought. A sound practical understanding and character, will, in the humblest individual, grasp it to advantage; but it has no more to do with making a sound mind in the various callings of life than wearing gloves has. Indeed, if *forced* upon ordinary characters, it is likely to breed as great a dislike to rough employments, as the glove creates antipathy to a dirty hand.

Mr. Elliot proceeds to state who are the efficient overmen underground. Those "who have worked at everything with their own hands." "Good substantial men," who have not frittered their time away in scribbling or muttering over books, but in the midst of their useful daily avocations, acquire and practise as much of these easily acquired artifices as *is necessary for their purpose*, and no man wants more. According to their native talent, energy, and character, they will find means to increase these *then* really useful acqulsitions, because they are acquired *with an object*, and, if fitted for a "higher office," they will rise to it without the annihilating disadvantage of being incapacitated for a lower. I know a man who cannot read or write a stroke, but he has a means of his own, by which he keeps the accounts, with exactness, of colliery labour to the extent of 300*l.* a month, and his accurate judgement upon all general points of distance, direction, level, &c., will not be discountenanced by the most nicely-constructed dial. Of course, this is an extreme case, but it is enough to show how much unnecessary acquirement youth may idle their time over. To make the labouring classes really useful and respectable, we may take a hint from the monasteries of La Trappe, and believe that idle hands will make an idle head. I remember some excellent remarks by Mr. John Darlington, in your Journal in 1847, as to the class of men he should prefer consulting with in laying out a new colliery. We must still recur to the question—if there is to be a system of Government inspection, where are the inspectors to come from? Are they to be Mr. Elliot's viewers, unfit to be "the working men in the matter?" are they to be free-trade importations from abroad without duty, or shall they be the pensioners from Greenwich Hospital? who, for all practical purposes, I would back against any class of inspectors who have hitherto been advanced. There are other important suggestions in Mr. Elliot's evidence, which I may, perhaps, continue to remark on.

March 19. DAVID MUSHET.

SEWAGE OF THE METROPOLIS.

SIR,—On the 15th March the report of the Special Committee upon the plans, sent in by volunteer engineers, signed by Sir J. Burgoyne, Mr. Stephenson, Capt. Vetch, Mr. Harness, and Mr. Rendel, was read. The report says that the best conceived and most practical scheme is that of Mr. M'Clean. The committee are also pleased to place in the same class, as containing very great merit, the schemes of Mr. Bayley Denton, Messrs. Nasmyth and Statham, Mr. J. Phillips, and Mr. H. Austin.

The leading features of these five schemes consist of tunnels of 10 or 12 ft. in diameter, and many miles in length. Some propose to save the manure for agricultural purposes; some to discharge into the Thames far below London; and others to employ engine-power to lift up this offensive composition to the surface. Mr. M'Clean proposes to borrow the water for flushing from the canals and Serpentine river, some from the Colne, others from the Thames; and although, with the exception of Mr. M'Clean's, whose estimate is 500,000*l.*, no sums are attached, they must needs demand many hundred thousand pounds, and many years in the execution.

The commissioners conclude their report with a very prudent proviso regarding expense:—"Though we have felt justified in expressing commendation of several of the propositions submitted to us, we are bound to state that in our opinion the estimates sent in are, with scarcely an exception, totally inadequate; and in appreciating any scheme, to be eventually decided on, the question of expense is one of the primary elements for consideration."—"The object of these observations is to present to the minds of the committee the more prominent characteristics of the plans they are called upon to consider, and not to define the system of drainage, which it may hereafter be considered expedient to adopt."

The suggestions of Mr. Phillips and of Mr. Austin were, in some degree, developed under the old commission; and the difficulty which attended them are supposed to have led to the public invitation which produced the plans now under consideration. I confess myself at a loss to imagine why the above plans have been placed at the head of the list; whilst the commissioners avow "that the question of expense is one of the primary elements for consideration;" for they are assuredly amongst the most stupendous of the schemes. However, my principal object is not so much to scan the expense and capability of executing such vast works, provided plenty of money is forthcoming, as to show by some practical reasoning how this stupendous tunnel system would stand affected. In ordinary mining, water course drifts are seldom arranged for at a less rise than 1 in 12, or about 12 ft. to the mile; whereas these contemplated tunnels are laid out upon a principle of falling from 1 to 4 ft. per mile. To persons acquainted with this species of engineering, such a fall would appear perfectly incompetent to the discharge of the sewage. Assuming the tunnel to be 10 ft. wide, what an enormous supply of water would be required moderately to flush it; and, where the water was at all scanty, what a settling of sewage would not take place—it would approximate as nearly as possible to the state of the Fleet-ditch; therefore, the least practical descent that such main sewer should have, would be one-eighth of an inch to the yard, or about 18 ft. per mile; and assuming, in round numbers, the length of the principal sewer to be 8 miles, the tunnel would acquire, including its depth from the surface, at least 20 or 30 fathoms at Blackwall, which would call for heavy pumping apparatus—the application of which to sewage stuff would be a most nauseous and uncomfortable affair. As for the expense, the dealing with hundreds of thousands of pounds in that summary manner, carries with it the greatest objections; for, to arrive at anything like an approximation to reality, would require the most tedious and extensive calculation. A final grand objection appertains to any scheme, embracing a series of huge tunnels, is the extended time necessarily required for completing. It cannot be tried in detail, for the whole must be finished before the effect can be tested, and that must take years to accomplish. In short, I do not wonder that the commissioners, whilst they laud the grandeur and engineering conception of these authors, hesitate to attach to them *their practical approbation*; for it would but condemn the metropolis to await the coming of another cholera, with a set of unfinished works. They surely can select from amongst the numerous plans sent in, some ready application to the present sewages—the cost of which, and the time required to complete it, can be brought within the scope of ordinary time and calculation; so that, once set a-going, it may with suitable speed advance towards developing its usefulness, as at least applicable to a large portion of the metropolis; for, it cannot be expected that any one scheme can be made applicable to such an immensely extended and populous city.—C. E.: *March* 28.

TUBULAR BRIDGES.

RESPECTED FRIEND,—In addition to my communication last week, permit me to offer some further remarks upon the costly system of tubular bridges. I find, by Wm. Fairbairn's account, that the weight of rivets alone is 680 tons, which contribute nothing to the strength, but, on the contrary, acts as an injurious load, equal to a strain of four times their weight—viz.: 2744 tons. The weight of the rivets alone is about 200 tons more than the weight of all the suspending and supporting bars of the structure I have described, and amounts to about three-fourths of all the wrought-iron I proposed in a structure 1500 ft. long, 36 to 40 feet wide! I have stated that the suspending and supporting bars in the Twerton-bridge is under 5 tons, its length about 240 ft., and 14 ft. wide; yet, by proper precaution, I would not hesitate to load it uniformly with 10 times that weight, or 50 tons, and I have no doubt but that it would support double that load (100 tons) with perfect safety; in like manner, assuming the suspending and supporting bars of the plan I propose to be under 500 tons, I should not hesitate to put on a uniform load of 10 times the amount, or 5000 tons. But where would the tubular bridge, weighing 8500 tons, be, if even only double its weight was laid upon it, which, according to my ideas, would cause a strain of 34,000 tons? Thus, assuming that 1000 tons of wrought-iron would be ample for 1500 ft., and that 30*l.* per ton would be sufficient to cover the whole cost of making, fixing, and completing, this would be 30,000*l.*; the tubular bridge, about the same length, 8570 tons, costing, by the time it was completed, probably from 40*l.* to 50*l.* per ton—say, therefore, 40*l.* per ton, 342,800*l.*; difference in favour of the inflexible suspension bridge of only 312,800*l.* It further appears, according to Wm. Fairbairn's account, that there is 500 square inches in the bottom, 565 square inches in the top, and 259 square inches in the sides of the bridge; therefore, treating it as a beam—the upper half compression, the lower half tension—the tension part will be 500 inches in the bottom, and one-half of the sides will make (say) 630 inches, which, multiplied by 25 tons to the inch, gives 15·750 tons tension power to each tube, or 31·500 tons to the two tubes to support its own weight, causing a strain of 11,200 tons, or about *one-third of its actual capacity*; whereas the section of the suspending bars for a bridge, equal to the two tubes, would be 680 inches, equal to 16,000 tons to support its weight, not exceeding 500 tons, which, with a load of 500 tons, would cause a strain of only 2000 tons, *or one-eighth of its capacity*. I am, therefore, fully persuaded that the inflexible suspension bridge, such as I have described, containing about *one-eighth of the material used in the Britannia Tubular-bridge*, would support two or three times greater load than would that stupendous production of art, but which, like the broad gauge system of railways and cast-iron atmospheric tubes, I feel confident will be found too costly for general adoption.

Having alluded to the Twerton-bridge, a model of the principle of which I am now making, as promised, I avail the opportunity of giving a brief account of the cause of its erection. About 11 years ago, then residing in Bath, I projected the construction of a bridge over the Avon on the principle of the bow and string, a model of which I made (and which model I intend to send to your office with those I am now making), together with drawings, only I proposed to have the arch so flat, or slightly curved, as to allow the roadway on the arch instead of on the cord line. The proposed site was close to the premises occupied by James Dredge, a brewer, who I induced to become a party in the project, which, it may be easily supposed, brought us frequently together, and to whom, of course, I communicated all my ideas of the principle of different kinds of bridges. After devoting many months of time, and after a considerable expense, occasioned by a protracted negociation with the Kennet and Avon Canal Company, I succeeded in overcoming every obstacle. About this time business required my absence from Bath for a few weeks. On my return, I found, to my surprise, that a party had suggested that an estimate for an ordinary suspension bridge should be obtained, and an application was made to an eminent house in Bristol (Acraman and Co.) to furnish an estimate. Upon hearing this, I informed J. Dredge that, if they were desirous for a suspension bridge, I would furnish them with a design superior to the ordinary suspension. I accordingly made a drawing (which I have now by me), showing the plan of straight suspending bars, graduated up the towers similar to what I have been describing, and showed it to J. Dredge, and at their next meeting I submitted the design for their inspection. To my great surprise, I there saw a design furnished by J. Dredge, showing a graduated chain perfectly straight, with oblique suspending bars from the main chain. After inspecting it, I pronounced it as impossible to construct it in the manner shown; J. Dredge still maintained the contrary. However, after a long debate on the matter, the meeting came to the resolution of declining to adopt either of my plans, and, at the same time, thanked me for all the trouble I had taken, without offering, or promising, one farthing compensation. Upon stating these circumstances to a party, they proposed to get up another company, to erect a bridge on my plan, about half a mile distance, near Twerton, which was finally accomplished.

I will further observe that, in order to show the superiority of my plan, I constructed a model of J. Dredge's plan, and one of my plan, containing exactly the same quantity of material in each, and gave a public lecture thereon at the Town-hall, in Bath. Among the audience was a Dr. Wilkinson, of considerable eminence in mathematics, and well known in Bath. After I had finished my observations and descriptions, I loaded J. Dredge's model with 4 cwts., which caused great deflection in the floor, and finally broke it; I then loaded the model of my plan, which supported 6 cwts., causing very little deflection without breaking. I subsequently offered Thomas Guppy, who took a considerable interest in J. Dredge's plan, that if he would furnish me with a model of J. Dredge's plan, and load it till it broke, then I would take the same bars, supplying new ones for those broken or stretched, and make them, on my plan, sustain at least 50 per cent. more, which, at his request, I gave in writing; but I never heard anything further from him or J. Dredge thereon. I may also further mention that J. Dredge proceeded to construct his design according to his drawings, and found out his mistake about his suspending chain, and was obliged to lengthen the links so as to accomodate the curve, precisely as I stated he would be obliged to do. J. Dredge did not pay sufficient attention to the thrust that the oblique suspenders caused against the abutments, the ignorance or neglect of which was the cause, as I understand, of the failure of the bridge he constructed for Calcutta, which caused such a frightful loss of human life. If any one is desirous of *seeing and feeling the trembling, shaking, undulating, and oscillating nature of his constructions*, let them go to the Regent's-park, where there is a foot bridge of considerable span, and I think they will find I have not overcharged the picture.

Among the models which I intend to furnish you with is a brass one of a draw-bridge, together with plans, drawings, &c., which was made for the St. Philip's Bridge Company, at Bristol. I will also avail myself of the opportunity of briefly detailing the circumstances which induced its construction. After I had completed the Twerton-bridge, I directed my attention to a project for making a bridge with cast-iron, in Bristol, and succeeded in getting up a company to effect it, and procured at least three-fourths of the subscribers for it. I. K. Brunel being consulted thereon, suggested that it was possible that, at some future time, a drawbridge might be made in the Bristol stone bridge, so as to allow vessels to come up to the railway station; and, as the proposed bridge was between it and their station, he thought it would be advisable to make it a draw-bridge, instead of a cast-iron one, as proposed; and it was finally agreed that, if the parties would consent to do so, the Great Western and Bristol and Exeter Railway Company would contribute 4000*l.* towards it, that being the extra cost I deemed would be incurred thereby. After much delay and trouble, all matters were arranged, and I went to Hull to inspect the draw-bridges

there, so as to avail myself of the best plans, and obtained all the drawings and information I could procure. At length we proceeded to Parliament, and finally obtained an Act of Parliament for its erection; after which, as I was comparatively a young engineer, it was thought advisable by the directors that I should have the assistance of an experienced engineer, and W. Gravatt, who was resident engineer under I. K. Brunel for the Bristol and Exeter Railway, was proposed, to which I did not object, but, on the contrary, was well pleased, thinking it would be advantageous to have the assistance of such, *as I then thought, an experienced, talented, and honourable individual.* Well, W. Gravatt at the first meeting of the directors, after his appointment, *approved my plan and design,* and stated that it might be possible that some little improvement might be made in the details.

We accordingly met subsequently, and went through all the details, as I thought, perfectly to his satisfaction, as he did not state to me a single objection; but, to my great surprise, a few weeks after, I found W. Gravatt had furnished an unfavourable report to the directors, condemning my plan as dangerous—so much so, that he would not warrant its standing two years, and sent in two plans and designs of his own, without ever saying one word to me on the subject. However, suffice it to say, he finally, by his conduct, induced the directors to reject me and my plans, though they certainly did act better than the Bath directors, by making me some compensation for my time and trouble—something like a quarter of what I should have gained had I not been so dishonourably deprived of my office. I will only further observe that W. Gravatt executed the bridge as nearly as possible upon the Hull bridge plan, with all its defects, and so inferior in its machinery, as to require three or four times more power to draw it than is required for the Hull bridges; and the contractor afterwards informed me that he considered my plan was superior to W. Gravatt's, and he could have executed it at 2000*l.* less! Thus it will be perceived that I have had to contend with very adverse circumstances; but not having funds or friends sufficiently to protect me, I was in both cases compelled to yield; but still I do not despair, firmly adhering, as I do, to my favourite motto—"*Nil disperandum veritate duce et auspice Deo*"—or, in other words, "*Never despair under the truth and providence of God.*"

Stangate, Lambeth, 3 *mo.,* 27. T. MOTLEY.

P.S.—I may further observe that the plans so unceremously condemned by W. Gravatt were previously and subsequently inspected and approved by many eminent architects and engineers—among whom I will mention I. K. Brunel's father, to whom I showed them in the Thames Tunnel, who, after inspecting them, expressed himself to this effect—"*The design, proportions, and arrangements, are beautiful and excellent, and the man who condemns them can know but little or nothing about bridges.*" So much for W. Gravatt. It is some satisfaction, however, to know that I have regained the confidence, and, I may add, the friendship, of the directors and shareholders of the St. Philip's Bridge Company, and W. Gravatt *vice versâ,* who was finally discharged by both companies. And now a few more words about the tubular bridge, and I have done for the present. Assuming the tenacity of copper to be about as 3 to 2, and presuming that 1000 tons of iron would be sufficient for a bridge, or bridges, 1500 ft. long, then it would require 1500 tons of copper to make a bridge equally strong; estimating the copper at 100 guineas per ton, the cost would be under 200,000*l.* Thus a bridge, composed of *comparatively imperishable material,* would be less than one-third the total cost of the Britannia Tubular Bridge, composed with the well-known *perishable material—sheet-iron.*

PARSEY'S COMPRESSED-AIR LOCOMOTIVES.

SIR,—The depreciated state of railway property is seriously felt by every proprietor, the dividends being totally inadequate to the great capital invested. The whole community is affected by the present depression, and something requires to be done forthwith to make investments in railways a business of safer and more profitable speculation. Railways having become a national system, cannot be abandoned for the old coach roads; and as it appears, from experience, that they cannot produce profits adequate to the capital and current expenses required to maintain steam locomotion, it is evident some plan commensurate with the great interests at stake must be substituted for the present system. Hopes are entertained of increased traffic, and from reducing the number and the wages of efficient hands, but no permanent or sufficient relief can be gained by such means. The great burden and real drawback upon railway enterprise are the irremediable amount of capital and the current expenses requisite to maintain the present locomotive system. Such being unquestionably the case, it is evident that capital and interest must be sacrificed by persisting in it, and that a beneficial change of system alone can remove the present depression in the share market, or give shareholders better prospects.

By changing the system from steam to air-power, railroads may be profitably established. The transition from the one to the other not being sudden, no sacrifice of vested capital need occur; for before a sufficient number of air locomotives could be constructed, the steam ones would be worked off gradually.

The capital employed in steam locomotives depreciated in value daily, and incurring constant repairing expenses, from carrying furnaces destructive of such costly machinery, though unavoidable in the system, makes reduction impossible, and reasonable profits bopeless. These are undeniable facts, which, on proper attention being paid to them, will be seen to be the primary cause of unsatisfactory railway dividends, and the greatest difficulty in honest direction. In considering the substitution of compressed-air locomotives, certain parties divert attention from the real sources of economy by directing attention only to the cost of obtaining air-power, but, as in the present system, *it is not the cost of power* that is fatal, or even objectionable, in either system.

The advantages of Cornish engines, worked by cheap coal, compared with the expenses of coke in locomotives, with the disadvantages of generating steam-power in the open air, leaves no doubt with disinterested practical men that considerable advantages are to be gained by air-power; in short, the more the system is investigated the more it recommends itself. A steam locomotive that cost 1500*l.*, with its constant expense for repairs, is destroyed, in a few years, more by its destructive means of generating steam than by fair wear. An air-engine, which need not ultimately cost more than 800*l.*, using its harmless power, advantageously produced by land-engines, will wonderfully economise capital and current expenses by its extended durability. The air-vessels substituted for the expensive tubes, boiler, furnace, &c., will suffer no injury from wear for a century; and as these locomotives will carry neither heat, water, nor fuel, they will run safely over any length of journey; and as, therefore, they need not be changed as at present, about half the number will be sufficient, and constitute another great saving of capital and expenditure. From these undeniable sources of economy considerable benefits may be derived, and many contingent savings must necessarily follow. The fair trial of such an important invention involves only the trifling expense of an experimental engine to prove to proprietors, and the community at large, the unquestionable improvement and benefit of a change of system in working railways.

Oxford-street, March 27. ARTHUR PARSEY.

ON THE TAILS OF COMETS.

SIR,—The observation of your correspondent, Mr. Lake, in your last Journal, show what crude ideas some people have of the nature of the heavenly bodies. "The tails of comets (says Mr. Lake) are always turned from the sun. The well-known fact that the sun extinguishes fire, affords an explanation of this singular phenomenon; the same law that puts out fires, prevent comets burning, except in the side away from the sun, &c." I think the discoveries in electricity, and the numerous experiments which are almost daily made on the appearance of electro-magnetic sparks in passing through solid bodies, and the artificial production of the phenomenon of the aurora lights, &c., have not yet extended as far as Portsmouth, leaving out of the question direct astronomical observation of the paths and appearance of the phenomenon alluded to.

In Mr. Hopkins's well-known treatise on *Electro-Magnetism,* page 121, we find the following remarks:—"If, then, we find that a comet is a luminous vapour, moved by the solar polar currents, it would necessarily move towards the positive pole, and issue out at the negative pole, and thus continue its circular motion from and to the axis of the sun, as we see it," &c. "Comets make their first appearance as faint and slow moving objects, with little or no tail; but, by degrees, accelerate, enlarge, and throw out from them this appendage, which increases in length and brightness, till they approach the sun, and are lost in its beams. After a time, they again emerge on the other side, receding from the sun with a velocity at first rapid, but gradually decaying. It is after thus passing the sun, and not till then, that they shine forth in all their splendour, and that their tails acquire their greatest length and development. * * * The real diameter of the visible nebulosity undergoes a rapid contraction as it approaches, and an equally rapid dilatation as it recedes from the sun: the polar axis of the sun being nearly at right angle to the orbits of the planets, will account also for their paths being different, but constantly towards, and from, the same poles respectively." Sir John Herschel has lately expressed his opinion that it is impossible any longer to attempt the explanation of the movements of the heavenly bodies by attraction, as understood by the Newtonian theory. Comets, with their trains perversely turned from the sun, have deranged the whole of our old systematic views most sadly; and this distinguished philosopher has now candidly confessed that we must modify our scientific doctrines as hitherto propounded, and look to electro-dynamics for the *vera causa* of the Newtonian philosophy.

Greenwich. March 26. G. M.

COMETS.

SIR,—The comet of 1823 had two tails—one was TURNED TOWARDS THE SUN, and the other away from it, forming an angle of 160°. The idea that comets are beings in combustion is repudiated by all modern astronomers.—J. MURRAY: *Portland-place, Hull, March* 25.

TELEGRAPHIC WIRES, &c.

SIR,—It is more than *two years* since I proposed, in a communication to the *Mining Journal,* to protect the wires of the electric telegraph on the principle of the paragrêle, from the effects of the thunderstorm by insulated wires. Such must, however, be planted more thickly than the wire supports on railways, because the influence of a good conductor does not extend beyond double its radius. I recommended *copper* wires. I believe every sound electrician would put his *veto* on IRON as a material for a lightning conductor, and for these sufficiently powerful reasons:—Its ready ignition and fusion by electricity, its inferiority as a conductor, and its susceptibility of oxidation. The *New York* ship was supplied with an *iron* conductor, 3-10ths of an inch diameter. The lightning descended, when it was fused throughout, and fell in melted drops into the sea!

Portland-place, Hull, March 25. J. MURRAY.

THE GUNPOWDER CATASTROPHE AT HOUNSLOW.

SIR,—Whatever may have been the primary cause of the original recent explosion of gunpowder at Hounslow (though no doubt connected with the friction of silicious matter), the continuity of *successive explosions* is easily accounted for and understood—namely: the sudden *condensation,* or *compression,* of the atmospheric air, or its collapse, occasioned by the first explosion; thus, by condensing air in a cylinder by a piston, amadon is ignited, phosphorus kindled, &c. Thus, too, a flash of lightning accompanies the launch of the avalanche from its eagle nest into the valley. In the explosion of chloride and iodide of nitrogene, a flash is the constant accompaniment; and, in the former case, it is seen even *under water.* A flash accompanies the explosion of fulminating mercury under percussion. This takes place when struck by a steel hammer on *iron;* but I find that, when fulminating mercury is struck by a steel hammer on a surface of *brass,* ignition merely takes place; but there is *no explosion!*

Portland-place, Hull, March 25. J. MURRAY.

"THE VESTIGES."

SIR,—It is presumed that the more reflecting part of the public will think that the apologist of that *ideal romance* called the *Vestiges of Creation* has more boldness than discretion. It has been said that "discord is harmony not understood," and in some such way, I suppose, we are to understand what the apologist is pleased to call "sublime reasoning;" for my part, I do not affect to understand that process of "reasoning" (?) whose premises are an ideal gratuity, and I have no community of feeling with the atheistical assumption which dispenses altogether with the intervention of a creative fiat. As to the *facts* of the case, I venture to defy an appeal to a solitary case, either in living nature or extinct organic remains, which gives the slightest countenance to the transmutation of species through the medium of generation. As to the vesicle of albumen and its interminable complications of evolution, it would be an insult to the intellect of babyhood! The rhapsodies of La Marck, Geoffroy St. Hillaire, and Bary de St. Vincent, may be safely consigned to the winds, without the slightest detriment to reason or science. The nebular hypothesis has been entirely dissipated by the discoveries of the Earl of Rosse's telescope. Yet on these aerial fancies is founded that flimsy cobweb of sophistry, which is called *The Vestiges of Creation.*—J. MURRAY: *Portland-place, Hull, March* 28.

VOLCANIC ERUPTION.

SIR,—As the recent volcanic eruption of Vesuvius has excited considerable interest, and as I may in a future communication particularly describe my descent into the crater of that volcano in 1818, and what I saw there, perhaps an extract from a private letter from Dr. Melville, of St. Vincent, West Indies, in reference to the great eruption of the Morne Souffriere—a mountain situated about the centre of that island, and which took place on the 1st May, 1812, may be acceptable. Some of the ashes fell in Barbadoes, though the wind blew in the opposite direction; and I possess a portion of the volcanic dust taken from the deck of a ship at sea, then 300 miles distant from St. Vincent. Dr. Melville says—"From this awful phenomenon no small injury has been sustained; houses have been demolished, lands laid waste, and several negroes buried in the ruins. However, the fate of this island might have been worse. Numerous, indeed, have been the visitors frequenting the fiery source since its first display. With the same object in view, I rode to windward 20 miles, and ascended the Morne Agaron chain of mountains, at the northern extremity of which Morne Souffriere is situated. At the bottom of the former, a very large river, termed Rebecca, used to flow. Now, however, we could scarcely trace a vestige of water, and, in lieu of this, an immensity of disagreeable fumes, issuing from sulphurous ores reduced to a state of liquifaction, presented themselves to our view. In addition to these phenomena, the whole of the numerous beautiful trees and shrubs, which formerly decked the whole chain of the mountains, were stripped of their folliage and completely overthrown, together with the destruction of the various species of birds that were once accustomed to warble their happy strains among their branches. Words, however, are incapable of affording an adequate idea of this once majestic spot, and its now dreary desolation. A general quiet seems now to reassure the inhabitants of St. Vincent, though there are several small explosions continually taking place from large craters formed on the summit of Morne Souffriere." J. MURRAY.

Portland-place, Hull, March 26.

CURIOUS INVENTION.—MM. Ebart, proprietors of one of the largest paper manufactories in Germany, situated at Neustadt, Elberswold, have just invented an incombustible cartridge paper, which they term "stone paper," and which is intended especially for roofing houses. It is destined to take the place of tiles, over which it has this two-fold advantage, that it is not fragile, and is very inexpensive. By order of M. Von der Heydt, Minister of Trade and Public Works, the Royal Commission of Buildings has submitted the stone paper of MM. Ebart to numerous tests, from which it results that it is at the same time impermeable and fire-proof. The commission has strongly recommended it to the peasantry as a substitute for thatch.

LOANS TO IRISH RAILWAY COMPANIES.—It appears from a return just issued that the Public Works Loan Commissioners lent to the Dublin and Drogheda Railway Company, at various periods, from the 26th of December, 1842, to the 20th of March, 1848, sums amounting in the aggregate to 156,000*l.*, at 5 per cent. The interest paid amounted to 30,050*l.*, and the principal repaid to 51,179*l.*, leaving 105,821*l.* due. They lent to the Great Southern and Western Company, between the 20th of September, 1847, and the 29th of January, 1849, 495,000*l.*, at 5 per cent. The interest paid amounted to 36,012*l.* They lent to the Waterford and Kilkenny, between the 20th of September, 1847, and the 26th of November, 1849, 83,000*l.* The interest paid amounted to 6130*l.* They lent, on the 3d of November, 1849, to the Midland Great Western (first advance) 100,000*l.*, at 3½ per cent. Total of all moneys lent 834,000*l.*, of which 51,179*l.* was repaid. The interest paid amounted to 72,193*l.* The Commissioners of Public Works in Ireland lent to the Dublin and Kingstown Company 75,000*l.* on the 5th of November, 1832, and 37,200*l.* on the 29th of November, 1836, at 4 per cent.: together, 112,200*l.*, of which 54,596*l.* was repaid: 51,016*l.* was the amount of interest paid, and 1875*l.* was the amount of interest due. The principal outstanding amounts to 57,064*l.*, which is in course of repayment by half-yearly instalments of 3000*l.* The sum lent to the Ulster Company on the 18th July, 1840, was 20,000*l.*, at 5 per cent., which has been repaid. The amount of interest paid was 3813*l.* On the Dublin and Kingstown branch to Dalkey 25,000*l.* was lent on the 24th of November, 1842, which has been repaid with interest amounting to 1538*l.* The total amount advanced was 157,200*l.*, of which 99,596*l.* was repaid—leaving 57,604*l.* due, which is in course of payment. The amount of interest paid was 56,367*l.*, and amount due 1875*l.*

ABERDEEN RAILWAY.—It appears the directors intend to open the remaining portion of this line to Aberdeen in the course of next week, provided they obtain the sanction of the Government officer. On the line being opened for traffic it will complete the communication between Aberdeen and London.

ON AN OIL TEST.

BY JAMES NASMYTH.

The author has contrived an instrument, by means of which the comparative value of various kinds of oil, as lubricating agents, may be ascertained. In all the contrivances which have been proposed as oil tests, a most important element has been left out—viz., *time*—inasmuch as the evil which is experienced from the use of a bad quality of oil is only developed after the lapse of several days, when, by the action of the oil upon the metal with which it is in contact, together with the action of the air, such oils become viscid, and begin to clog instead of facilitating the movements of the parts of the machinery it was intended to lubricate.

In the more delicate descriptions of machinery, such as chronometers, watches, clocks, &c., such a defect as the thickening of the oil by lapse of time is a most serious evil; and in examining into the comparative fitness of certain oils for such applications, if we do not include *time* as an element in our examination, we shall be led to form most false conclusions, inasmuch as it is the case that for the first day or two some kinds of oil (linseed oil for example) perform the lubricating duty very well, but at the end of the second or third day they become so thick and viscid as to entirely arrest the motion of the machinery.

The most valuable quality in an oil intended for the lubrication of machinery is *permanent fluidity.* That oil which will for the greatest length of time remain fluid in contact with the iron or brass is, without doubt, the most useful for the purpose. Hence, as before said, the necessity of including the element of *time* in any experiment on the comparative value of such oils.

Some idea may be formed of the importance of having the means of arriving at correct conclusions on this subject, when we know that in some spinning establishments there are upwards of 50,000 spindles in motion at the rate of 4000 or 5000 revolutions per minute! The slightest defect in the quality of the oil in such a case, by its becoming viscid, tells in the most serious way upon the quantity of fuel consumed in generating the power required to maintain at this high velocity such a multitude of moving parts. The slight increase of fluidity consequent on the rise of temperature, caused by the lighting of the gas in the rooms of a cotton-mill, makes a difference of several horse-power in the duty of the engine of an extensive establishment. The oil test consists, as will be seen, of a plate of iron 4 inches wide by 6 feet long, on the upper surface of which six equal-sized grooves are planed. This plate is placed in an inclining position, say 1 inch in 6 feet. The mode of using it is as follows:—Suppose we have six varieties of oil to test, and we are desirous to know which of them will for the longest time retain its fluidity when in contact with iron and exposed to the action of the air; all we have to do is to pour out *simultaneously* at the upper end of each inclined groove an equal quantity of each of the oils under examination. This is very conveniently and correctly done by means of a row of small brass tubes. The six oils then make a fair start on their race down hill; some get a-head the first day, and some keep a-head the second and third day, but on the fourth or fifth day the truth begins to come out; the bad oils, whatever good progress they may have made at the outset, come soon to a stand-still by their gradual coagulation, while the good oil holds on its course, and at the end of eight or ten days there is no doubt left as to which is the best; it speaks for itself, having distanced its competitors by a long way. Linseed oil, which makes capital progress *the first day,* is set fast after having travelled 18 inches, while second-class sperm beats first-class or refined (?) sperm by 14 inches in nine days, having traversed in that time 5 feet 8 inches down the hill. The annexed table will show the state of the oil race after a nine days' run:—

RESULTS OF OIL TEST.

Description of Oil.	First.	Sec.	Third.	Four.	Fifth.	Sixth.	Seven.	Eighth	Ninth
	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.
Best sperm oil.....	2 8½	4 2	4 5½	4 6	4 6	4 6	4 6½	Stat.	
Common sperm oil..	1 7	3 9	4 6½	4 11	5 1½	5 4	5 6½	5 7½	5 8
Galipoli oil	0 10½	1 2½	1 6	1 6½	1 7½	1 8½	1 9	1 9½	1 9½
Lard oil.....	0 10½	0 10½	0 10½	0 10½	0 11½	Stat.			
Rape oil.....	1 2½	1 6½	1 7	1 7½	1 7½	1 7½	1 7½	1 7½	Stat.
Linseed oil	1 5½	1 6	1 6½	1 6½	1 6½	1 6½	1 6½	Stat.	

Mr. Nasmyth feels satisfied that this mode of testing the qualities of oil intended for the lubrication of machinery will give out much useful information, and, therefore, trusts it will meet with attention.

The late Dr. Potts.

We are sorry to announce the death of Dr. LAWRENCE HOLKER POTTS, which took place on the 23d March, after a long and severe illness, at his house, in Buckingham-street. Dr. Potts was the son of a medical man of some standing, and descended from literary characters of eminence. He was born in London in 1789, and brought up at Westminster School—having for his class-fellows Lord John Russell and the Duke of Bedford. He was there more distinguished for what were considered his mechanical delinquencies than for his classical proficiency. To indulge in his favourite occupations, he constructed an electrical machine from an old wine bottle, and other rubbish, fashioned with his pocket-knife. This relic long remained in the doctor's museum in working use. Being destined for the medical profession, he became a house pupil of Sir Benjamin Brodie, with Dr. Locock, and was entered at St. George's Hospital. On passing his examination, Dr. Potts obtained a commission on the nomination of the Prince (George the IV.), as surgeon in the Royal Cornwall Militia, and thus laid the foundation of a connection with our mining county. Having served with the regiment in Ireland and in Cornwall, until it was disbanded after the war, Dr. Potts settled in Cornwall, married a lady of the county, and became surgeon to the County Lunatic Asylum. During his residence at Bodmin, he was distinguished as much for his professional and scientific attainments as by his hospitality and liberality in supporting every useful institution, particularly the Royal Cornwall Polytechnic Association, of which he was one of the founders. In his zeal for science, his house became a complete museum and laboratory. A very fine collection of Cornish minerals, inclosed in a choice cabinet, inlaid by himself with Cornish woods, was formed by him at this period, and afterwards presented to Prince Albert for the Prince of Wales. During his residence in Cornwall, Dr. Potts was most assiduous in the prosecution of scientific researches, as much of a practical as of a theoretical character; but it is to be regretted that, like many men of genius, he devoted too little time to recording his observations—of which, however, he has left a large mass in an undigested state. Perhaps no man has devoted more labour to researches in osmics and peptics—the little-known sciences of smell and of digestion—in which he had made many discoveries. Having matured some of his inventions, Dr. Potts came back to London, about 10 years ago; and, while engaged in their prosecution, opened a large establishment at Blackheath, for the treatment of deformities, in which his mechanical acquirements gave him the greatest success, and which, it is to be regretted, his declining health obliged him to give up, as his stern abhorrence of quackery, and the confidence reposed in him by the leading members of his profession, particularly qualified him for the cure of diseases which, as yet, have hardly been brought within the domain of established medical practice. The invention of what is called the hydraulic process for pile-driving is one of those master performances, so happy in its simplicity, as to assure the reputation of its author. For this Dr. Potts took out patents in England and abroad, and it is now extensively applied as a recognised resource of engineering science; and, indeed, nothing of late years, except the locomotive, has so much extended the powers of the engineer. In the field of hydraulics, it cannot fail to work out the greatest results. The chief applications as yet made of it have been in various works under the Trinity Board (particularly in reaching a depth of 70 feet; in the Maeldraeth Viaduct), on the Chester and Holyhead Railway; the Black Potts Bridge, over the Thames, on the Windsor Railway, and on the Great Northern Railway; and in sinking a mine shaft under the sea in Cornwall. Many great works are still in progress or contemplation. The Doctor is also the inventor of a process for preserving meat, of a mode of applying gutta percha splints and dressings, an application of gunpowder as a locomotive power, and of an atmospheric railway, besides many other things, on which he expended large sums. Few men have passed through life with greater contentment, as few have enjoyed to the same extent the esteem of friends and contemporaries. Of an upright and independent character, Dr. Potts paid little regard to accidents of fortune, or to the attributes of poverty and wealth, and knew no distinctions among men but his power of serving them; and those who needed not to partake of his purse felt themselves obliged, even in the highest stations, by the liberality with which he laid open his stores of knowledge, and by his readiness to do every kindness in his power.

THE STEEL TRADE.

We are glad to be able to confirm our circular of last month [see *Mining Journal* of the 16th February] as to the steel trade, and Sheffield trades generally, progressing towards a condition of fair employment and wages for the operatives, as well as a fair return for the investment of capital, and the skill and enterprise of the manufacturer. This is to the better security of the purchaser, so far as the *quality* of the goods is concerned, which requisite is often lost sight of, when, by excessive competition, arising from the dulness of trade, the wages of the operatives, and profits of the manufacturer, are materially reduced. We have ascertained, from investigation, that in several branches of the staple trades of the town, the number of hands employed at this period, in comparison with the same time last year, have increased as follows:—

File trade, in all its branches	595
Saw trade	94
Table knife trade	182
Edge tool trade	77
Spring knife trade	93
Various other trades	510=1555

And, as it may be fairly estimated, that there was such a number only partially employed, including old and young, as being now in full work, will double the above calculation, it results that there is an actual improvement in the district, within one year, of employment for near 3000 operatives, besides the increase in their wages; a very cheering state of things, and a great relief not only to the trade funds of the workman, but also to the inhabitants generally, who must all share in their prosperity. With moderation and co-operation between employers and the employed, and keeping in mind the liability to changes, which are sure to occur sooner or later—and in consequence avoiding extremes as dangerous—it is not to be doubted that the present year will heal up many sores made by the unprecented combination of causes, occurring in succession, for some years previously. The steel trade—speaking of the raw material—is necessarily one which involves confidence on the part of the purchaser, in the manufacturer from whom he draws his supplies, it being impossible to define the exact quality of steel from its external or internal appearance, thus differing from what may be done in reference to most other articles of manufacture, as in wool, silk, or cotton; and it therefore requires an undoubted character for fairness and standing on the part of such manufacturer, to guarantee the purchaser in his selection of the firm with whom he deals; and he rarely errs when he follows these criterions, although it must be admitted that various houses differ in their prices to a very material extent—partly owing to a difference in the mode of conducting business, partly to the want of a Trade List of Standard Prices for Steel, and partly to the competition instituted by firms entering into the market at reduced profits, as compared with the rates of others who have earned a good reputation from supplying steel of good quality for a long period. As regards a standard price, it could only apply to blister steels retaining the original marks after conversion, as when forged, rolled, sheared, or cast, all identification ceases. The article of spring steel might be fairly classified—the necessary qualities of rolling sound from the blistered bar, and of bearing the heat requisite to draw it into a spring, combined with the subsequent test of specific pressure—identifying it as being the first on the list of low-priced Swedish irons, having a malleable quality when made into steel; or the highest on the list of British irons, as produced by the eminent firms of the Low Moor Company, and the Bowling Company; and as nothing beyond these ample tests is required, an average price may be arrived at. The report of the Institution of Mechanical Engineers, in their proceedings of January [see *Mining Journal*, Feb, 2], after actual experiments of relative quality, state "that the elasticity, sustaining power, and toughness of the English steel, is much greater than that manufactured from the Swedish iron." This is in allusion to springs for railway purposes. In the common and middle qualities of steel, and in single or double shear or cast-steel, any medium price may be quoted, dependent on the use or purposes for which such steel is intended. In the higher qualities, a range of 5s. or 10s. per cwt. between different firms cannot be considered inconsistent, from the reasons before stated.

Sheffield, March 26. BLAKE AND PARKIN.

New Patents.

[From the *Mechanics' Magazine* of this day.]

SPECIFICATION ENROLLED DURING THE PAST WEEK.

WILLIAM BOGGETT, of St. Martin's-lane, manufacturer: For improvements in heating and evaporating fluids. A large portion of the improvements embraced under this patent relates to the construction of gas stoves, the objections which have so long retarded the adoption of which, they seem well calculated to remove. The nature of the remaining improvements specified by Mr. Boggett will be gathered from the claims, which are as follows:—

Claims.—6. The construction of ovens with the top and bottom sides composed of corrugated or fluted plates, containing in the corrugations or flutes thereof pipes for the circulation of steam or hot air, and also a modification thereof.—7. The employment for heating and evaporating purposes of cells or vessels permanently filled with heated water or other fluid, or metallic alloys in a fluent state, in the manner described.—8. The employment in steam boiler of flues, having short cross tubes open at both ends.—9. The construction of the flues or tubes of steam-boilers, or other heating apparatuses, with an internal lining of fire clay, or with internal division pieces of fire clay.—10. A peculiar construction of steam or hot-water tubes.—11. Peculiar modes of heating of steam-boilers by gas.—12. The employment for heating and evaporating purposes of a combination of hydrogen, or carburetted hydrogen gas, in a cold or heated state, with heated atmospheric air, or with heated atmospheric air and lime; also the combination of heated oxygen gas with hydrogen gas, either cold or heated.

LIST OF PATENTS GRANTED DURING THE PAST WEEK.

J. Stevenson, of Roan Mills, Dungannon, County Tyrone, flax spinner, for certain improvements in machinery for spinning flax and other substances.

W. Sykes, of York-street, Middlesex, tallow chandler, for certain improvements in the manufacture of candles and wicks.

J. Varley and J. Hacking, of Bury, Lancaster, engineers, for certain improvements in steam-engines and apparatus connected therewith.

H. R. Ramsbotham, of Bradford, York, manufacturer, and W. Brown, of the same place, mechanic, for improvements in preparing and combing wool.

W. J. Curtis, of Port of Spain, in the Island of Trinidad, in the West Indies, civil engineer, for improved machinery and apparatus adapted for the manufacture of sugar.

H. Carter, of Thirza-place, Old Kent-road, Surrey, gentleman, for certain improvements in the production of light from ordinary coal gas, by the use of burners, consisting of more than one ring or sheet of flame, combined with a suitable chimney or chimnies, and supplied with atmospheric air particularly adapted to ventilation.

J. Siddeley, junior, brass founder, of Liverpool, Lancaster, for certain improvements in ships' fittings.

A. Wilson, of Myddleton-street, Clerkenwell, Middlesex, clock-case maker, for an improved ventilator.

J. Gedge, of 4, Wellington-street, Strand, Middlesex, for improvements in lamps and candlesticks. (Being a communication.)

N. Mathew, of Wern, Tremadoc, Carnarvon, quarry proprietor, for an apparatus for cutting or dressing slates into various shapes and sizes.

A. V. Newton, of Chancery-lane, Middlesex, mechanical draughtsman, for improvements in the preparation of materials for the production of a composition or compositions applicable to the manufacture of buttons, knife and razor handles, inkstands, door-knobs, and other articles where hardness, strength, and durability are required. (Being a communication.)

A. G. Roseleur, of Paris, France, but now of 4, South-street, Finsbury, Middlesex, chemist, for certain improvements in coating or covering metals with tin.

E. Welch, of St. John's Wood, London, architect, for improvements in fire-places and flues, and in apparatus connected therewith.

A. V. Newton, of Chancery-lane, Middlesex, mechanical draughtsman, for improvements in coupling joints for pipes. (Being a communication.)

T. D. Rotch, Esq., of Drumlanford House, Ayr, North Britain, for improvements in separating various matters usually found combined in certain saccharine, saline, and ligneous substances. (Being a communication.)

E. Leigh, of Miles Platting, near Manchester, cotton spinner, for certain improvements in machinery or apparatus for preparing and spinning cotton, and other fibrous substances.

J. T. Clenchard, of Paris, France, manufacturing chemist, for certain improvements in the application of orchil to the processes of dyeing and printing in colours, and also an improved apparatus to be employed in the operation of dyeing.

J. Preece, Hereford, shoemaker, for certain improvements in mills and machinery applicable to the threshing and grinding of corn, the manufacture of cider, and other similar purposes.

DESIGNS FOR ARTICLES OF UTILITY REGISTERED.

A. Vaughan and J. Hossack, Manchester, a self-acting lubricator, or oil cup, for shafts, spindles, or any similar objects revolving in a horizontal position.

F. A. Dietrich, Bennett-street, Blackfriars, an elastic hat lining.

S. Collier, Reading, junction pipe or hollow brick.

J. Lockhead, F. Sanders, and C. Richardson, New Oxford-street, a ship's scuttle.

Spilsbury and Downs, Huggin-lane, Cheapside, fastening for articles of dress.

C. Halliman, Kensington, a fruit protector.

THE MINERS OF DANEMORA—THEIR PIETY AND POVERTY.—Mr. Robert Chambers, in his *Tracings of the North of Europe*, narrates the particulars of a visit to the Danemora Mines.—"A little while after our arrival the men began to assemble in their coarse homely dresses; but before going to work, they met in groups in small outhouses where their tools are kept, and here we witnessed an interesting ceremony. One of the number gave out a hymn, which the party thereafter sung. Then the same man uttered a prayer, and afterwards some sacred poetry, to which all listened reverentially. While we stood outside, listening to these devotions, several of the men came up, took off their caps, and joined in the service. It was most affecting to see these simple people, who daily expose themselves to a dangerous trade for their livelihood, thus put themselves into the hands of their Creator, resigned to every contingency which might arise in the course of His providence. When their devotions were concluded, all proceeded to their work; and it was curious to observe them spreading themselves over the sides of the pit, and commencing their various duties of digging and blasting. * * The men, we afterwards found, have wages which an English workman would regard as miserably low. Whether, as one often sees in Sweden, their efficiency as workmen is in proportion, I cannot tell. One of them, seeing a gentleman of our party munching a piece of common white-flour biscuit, expressed curiosity about it; and Quist then desired the gentleman to show the people what he was eating. My young fellow-traveller then distributed a few pieces, which the men regarded with as much wonder as an English labourer would feel respecting pillau or edible bird's nests. An old man, after turning his piece over and over, and chewing a little bit, put the remainder carefully into his tobacco-pouch, in order to take it home and show it to his wife. The simplicity of all this was a little amusing; but, what was better, it went to the heart."

HOLLOWAY'S PILLS AN ADMIRABLE REMEDY FOR THE CURE OF LIVER COMPLAINTS AND BAD DIGESTION.—Mr. Wilson, a gentleman lately returned from Bengal, where he had been employed for several years in the Hon. East India Company's service, called at Professor Holloway's establishment a few days ago, to state the benefit he had derived from taking these unparalled pills, having suffered from a liver complaint nor years, with a digestion so impared, that for months he could not make use of any solid food, other remedies seemed to have no effect on the disorders, but Holloway's Pills acted so wonderfully in cleansing the liver and strengthening the digestive organs, that he is now quite restored to health. Sold by all druggists, and at Professor Holloway's establishment, 244, Strand, London.

Will be published the first week in April, price 1s. 6d.,

ELECTRIC TELEGRAPH MANIPULATION,
By CHARLES V. WALKER,
Superintendent of Electric Telegraph to the South-Eastern Railway Company, Author of *Electrotype Manipulation*, Editor of the *Transactions, &c., of the Electrical Society*, of the *Electrical Magazine*, &c. Illustrated by numerous diagrams of the apparatus, drawings of stations, offices, plans, maps, views, &c.

London: George Knight and Sons, Foster-lane, Cheapside; sold by all booksellers, and at the Railway Stations.

Will be ready for publication on Saturday next,

MONEY VERSUS LIFE: A REVIEW of COLLIERY CASUALTIES—showing their Cause and Extent—the Parsimony of Coalowners—the Concealment of Deaths in Mines—the Inaccuracy of Returns by Coroners—the necessity of Government Inspection, more Shafts, and adequate Provision for Widows and Orphans of the Victims to Explosion, &c.—with the means to provide for the same without unjust taxation;—also showing the Clemency of Government towards the Coalowners of the North. By C. COLWELL.—Price 3s. 6d.
Simpkin and Marshall, London.

CALLINGTON MINES COMPANY.—At the Annual General meeting of the shareholders in this Company, held on the 27th inst., at Salvador-house,
PETER STAINSBY, Esq., in the chair,

The following resolutions were passed unanimously,—

That the report and accounts, now read and submitted, be received and adopted by this meeting, and entered in the cost and transfer book of the company.

That James Lewis, Esq., the Director retiring from the direction of the company by rotation, and who offers himself for re-election, be re-elected a director of this company,

That the auditors, Messrs. Hammond and Leary, who retire from their office of auditors, and who offer themselves for re-election, be re-elected the auditors for the present year.

CLARENCE RAILWAY COMPANY.—At the Annual General Meeting of shareholders, held at the George and Vulture Tavern, on Tuesday, the 26th inst., the following resolutions were passed:—

1. That the orders and regulations, bye-laws, and other matters now submitted to this meeting, be approved of and adopted, and that the common seal of the company be affixed thereto.

2. That the report now read be withdrawn, not being the unanimous report of the directors.

3. That a special meeting be called, to receive the annual report, on Tuesday, the 25th of June, 1850.

4. That this meeting be adjourned to Tuesday, the 25th of March, 1851, to be held at the George and Vulture Tavern, St. Michael's-alley, Cornhill, at One o'clock precisely.
HENRY BLANSHARD, Chairman.

STEAM TO INDIA AND CHINA, VIA EGYPT.—Regular MONTHLY MAIL (steam conveyance) for PASSENGERS and LIGHT GOODS to CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG-KONG.

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY

BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the ABOVE PORTS by their steamers—starting from Southampton on the 20th of every month; and from Suez on or about the 10th of the month.

BOMBAY.—Passengers for Bombay can proceed by this company's steamers of the 29th of the month, to Malta, thence to Alexandria by her Majesty's steamers, and from Suez by the Honourable East India Company's steamers.

MEDITERRANEAN.—MALTA—On the 20th and 29th of every month. CONSTANTINOPLE—On the 29th of the month. ALEXANDRIA—On the 20th of the month.

SPAIN AND PORTUGAL.—Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, on the 7th 17th, and 27th of the month.

For plans of the vessels, rates of passage-money, and to secure passages and ship cargo apply at the company's offices, No. 122, Leadenhall-street, London; and 57, High-street Southampton.

TOUGHENED CAST-IRON—STIRLING'S PATENT.
No. 1—For SMALL and MEDIUM CASTINGS.
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